

AIR WARS BETWEEN ECUADOR AND PERU

VOLUME 2: FALSO PAQUISHA!
AERIAL OPERATIONS OVER THE
CONDOR MOUNTAIN RANGE, 1981

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AMERICA

SERIES

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CONTENTS

Abbreviations	2
Acknowledgments	2
Foreword by General Mario Muñiz Ortega (FAP, retired)	3
1 A Protracted Conflict	4
2 The Ecuadorean Air Force, 1941-1981	6
3 The Peruvian Air Force, 1941-1981	14
4 Escalation	34
5 Aerial Operations from 27 January to 4 February 1981	43
6 Aerial Operations from 18 to 20 February 1981	56
7 Aftermath	58
Bibliography	62
Notes	62
About the Author	64



ABBREVIATIONS

AB	Air Base	FAC	Forward Air Controller
AdE	Aviación del Ejército (Army Aviation)	FACH	Fuerza Aérea de Chile (Chile Air Force)
AME	Aviación Militar Ecuatoriana (Ecuadorian Military Aviation)	FAE	Fuerza Aérea Ecuatoriana (Ecuadorian Air Force)
ARP	American Republics Program	FAP	Fuerza Aérea del Perú (Peruvian Air Force)
ASCC	Air Standardisation Coordinating Committee	FMC	fully mission capable (operational status of a military aircraft)
BAE	Buque Armada Ecuatoriana (Ecuadorian Navy Ship; equivalent use to HMS/Her Majesty's Ship in the Royal Navy or USS/United States Ship in the US Navy)	FNACP	Fábrica Nacional de Aviones Caproni Peruana S.A. (Caproni National Aircraft Factory, in Peru)
BIS	Batallón de Infantería de Selva (Mountain Infantry Battalion, Peru)	HOTAS	Hands on Throttle and Stick
CAP	Combat Air Patrol	IAI	Israel Aircraft Industries
CAP	Cuerpo Aeronáutico del Perú (Peruvian Aeronautic Corps)	IEHAP	Instituto de Estudios Historicos Aeroespaciales del Perú (Institute for Aerospace History of Peru)
CCFFAA	Comando Conjunto de las Fuerzas Armadas (Joint Command of the Peruvian Armed Forces)	INS	Inertial Navigation System
CO	commanding officer	MA	Ministerio de Aeronáutica (Aeronautics Ministry, Peru)
CORPAC	Corporación Peruana de Aeropuertos y Aviación Comercial (Peruvian Airport and Commercial Aviation Corporation)	MANPAD	Man-portable air-defence (system)
CPFG-M	Capitan de Fragata Estado Mayor (Commander Navy, High Staff; Ecuadorean military title)	MDAP	Mutual Defence Assistance Program
EAM	Escuela de Aviación Militar (Military Aviation School, Peru)	MGP	Marina de Guerra del Perú (Peruvian Navy)
EB	Escuadrón de Bombardeo (Bomber Squadron, CAP)	MRAP	Military Assistance and Reimbursable Basis Program (USA-Peru)
EC	Escuadrón de Caza (Fighter Squadron, CAP)	NATO	North Atlantic Treaty Organization
EE	Ejército Ecuatoriano (Ecuadorian Army)	OAS	Organisation of American States (Organización de Estados Americanos, OEA in Spanish)
EE	Escuadrón de Enlace (Liaison Squadron, CAP)	OCU	operational conversion unit
EI	Escuadrón de Instrucción (Instruction Squadron, CAP)	PV	Puesto de Vigilancia (Observation Post, Peru)
EIA	Escuadrón de Información y Ataque (Attack and Information Squadron CAP)	RAF	Royal Air Force
EIT	Escuadrón de Información Terrestre (Ground Information Squadron, Cap)	RM	Region Militar (Military Region, Peru)
ELINT	electronic intelligence	SAM	surface-to-air missile
EOT	Escuadrón de Observación Terrestre (Ground Observation Squadron, CAP)	SAN	Servicio Aerofotográfico Nacional (National Aerial Photographic Service)
EP	Ejército del Perú (Peruvian Army)	SEMAN	Servicio de Mantenimiento de la Fuerza Aérea (Air Force's Maintenance Service, Peru)
ET	Escuadrón de Transporte (Transport Squadron, CAP)	STOL	Short Take-Off and Landing
		UN	United Nations
		USA	United States of America
		USAAC	United States Army Air Corps (predecessor of the USAAF and then the USAF)
		USAAF	United States Army Air Force
		USAF	United States Air Force

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FOREWORD BY GENERAL MARIO MUÑIZ ORTEGA (FAP, RETIRED)

Air Wars between Ecuador and Peru volume 2: *The Falso Paquisha Conflict* written by our distinguished aviation historian Amaru Tincopa – with an admirable capacity for synthesis – is a book about the history of an armed conflict based on reports from the protagonists and the official documents from the archives at the Instituto de Estudios Historicos Aeroespaciales del Perú (IEHAP). It is a praiseworthy intellectual effort and a demonstration of affection, admiration and respect of Peru's recent history. In the description of the events, the author refers to the protagonists with their names and operative pseudonyms. One of them, then Captain FAP Jorge Dávila Cabrejos ('Dick Tracy'), said during an interview:

I took part in the recovery of PV-22 in the year 1981, flying as commander of Mi-8T serial FAP 677 and, as we all know, the Peruvian Air Force intervention in the operations of the Cordillera del Cóndor was a success.

In this conflict it was possible to demonstrate the great operational capacity of the FAP units, especially of my unit, *Grupo Aéreo N°3*. At that time, the GA N°3 had enough personnel and equipment to – simultaneously – take part in the defence and maintenance of integrity of Peruvian territory; it could also support the socio-economic development of the country, aiding in the oil operations and other civic action operations throughout the country.

No one can deny that the development and success of the operations in the Cordillera del Cóndor were a clear demonstration of the training, of the experience of its crews, of the knowledge of the area of operations. The Air Group N° 3 had an operational autonomy of maintenance, equipment and logistic support without precedents in the history of the Air Force.

Precisely, its equipment was oriented to fulfil missions in autonomous camps to carry out search and rescue activities. Regardless of the civic action tasks, their crews were trained in the launching of rockets, when even remotely we assumed that we would use our helicopters as a weapon in the defence of our territory.

It must be recognized that the success of the FAP in this conflict is due, in particular, to the fact that Air Group No. 3 had sufficient resources to establish radio stations in the Cordillera del Cóndor (Comaina, Ciro Alegría, Estación V, Station VII, etc.). Moreover, meteorological stations, maintenance base, fuel bladders, weapons system were available, which were strategically arranged by decision of their Group Commander – and that without a single order from above or following any kind of operational plan: none existed for this theatre.

It was known that the aim was to evict the invaders from our territory, and the High Command of our Institution supported all the suggestions that came from the Air Group Commander N° 3 because he understood that nobody knew the area better than him to advise the High Command and also to coordinate and direct these operations and, therefore, from the first moment some activities recommended by the then Colonel FAP Mario Muñiz Ortega were carried out, such as accompanying personally in the cockpit of the Lear Jet to make the photographic shots of the posts taken by the enemy, suggest that the guides of the different patrols of combat aircraft recognize the theatres of operations, both in height as well as physically visiting them for their respective identification.

The Air Group Commander No. 3 was commissioned to be the Air Component Chief and to direct the air operations, at that time the Light Army Aviation Group (GALE) crews were under-trained and proved unable to properly operate in the area.

I must mention that the knowledge of the area of operation was because the Air Force of Peru supported the supply to all the Surveillance Posts of the sources of the Comaina River and the Cénepa River in the Cordillera del Cóndor, from 1960 to 1977. For the EP to that date did not yet have helicopters – while the FAP was in charge of supplying the PVs of the Cordillera del Cóndor, the Ecuadorians did not occupy any PV.

It is precisely in those dates, that Don Mario Muñiz Ortega had flown making the supply of said Surveillance Posts in the Cordillera del Cóndor, from the rank of Ensign to the rank of Commander inclusive and, therefore, knew better than anyone the theatre in which the Conflict would develop.

Being Colonel and being Commander of Air Group No. 3, he was designated as Commander of the Air Component to support the surface forces in the recovery of our territory that at that time was being occupied by enemy forces.

I want to highlight, from a different perspective that a large part of the success of these eviction operations is due to the design of the operation of Colonel Mario Muñiz Ortega.

This and other information are contained in the confidential report issued by the GA N°3 Commander as well as the documentation from the different FAP combat units that the author has studied carefully for the preparation of this historic essay.

Having participated – since the beginning of operations – in this conflict, I agree with the author of this book in the assessments regarding the following:

Ecuador, for approximately 4 years, prepared the occupation of the installations of the Peruvian Surveillance Posts, in the headwaters of the Comaina River, abandoned in the year 1977 by agreement of the Ecuadorian and Peruvian Armies General Commanders. Ecuador then clandestinely occupied the headwaters of the Comaina River using false names of Ecuadorian populations like, 'Paquisha', 'Mayaicu' and 'Machinaza', to refer to the positions built by its army inside Peruvian territory. Ecuadorian forces then occupied the Peruvian surveillance posts PV-4, PV-3 and even performed improvements on their facilities building new infrastructure such as barracks, heliports, warehouses, etc. which were defended with anti-aircraft machine guns.

The 9K32M *Strela* air defence missile (ASCC/NATO-codename 'SA-7 Grail') was used to dissuade the Ecuadorian aviation that tried to bomb Falso Paquisha after its recapture. Our communication equipment, despite being very advanced for that time, had its limitations. Our personnel resorted to speak in Quechua to ensure the secrecy of the coded information.¹

The springs of the Comaina River and its surroundings are impassable, tangled and rugged jungle. The Peruvian troops had to be moved in helicopters. The narrow valley of the Comainas River, due to its confinement and ruggedness of the land, together with bad weather ever present in the area interfered and hindered the use of helicopters. The airfield at Ciro Alegría was extended in length with the help of tractors transported by Mi-6 helicopters and was soon declared apt for operations of even large aircraft such as the Hercules. For transport

duties the air force could rely on the Mi-6 helicopters, each of which could carry 12 tons and up to 90 soldiers. In addition, Lockheed Hercules, Antonov An-26 and de Havilland-Canada DHC-5 aircraft could transport fuel, ammunition and personnel from Iquitos or Lima to Ciro Alegría. For offensive operations the Mi-8s could be employed as gunships, and the An-26 transport aircraft could carry bombs.

The mission assigned to GA N°3 was to expel the invading troops, lower the Ecuadorian flag and raise the Peruvian one at 'Falso Paquisha', 'Falso Mayaicu' and 'Falso Machinaza' before the Guarantor Countries' representatives arrived in Peru. That happened on 30 January. Peru had a democratically elected President, and its armed forces in were the best condition of its entire history, with an operative capacity of 85%. Terrorism acts by Marxist-Maoist guerrillas, were only at an incipient stage.

GA N°3 crews, supporting the oil companies operations in the border area with Ecuador since 1971, flew 90 hours per month, were very well prepared and were familiarised with the operations area. The GA N°3 command and control post, from the beginning of operations, was strategically located in Comainas, less than 10 kilometres (6.2 miles) from the enemy, at the initiative and decision of the Air Group Commander.

In order to declare itself an 'Amazonian Country' on 29 January, Ecuador had prepared itself for four years and assumed that these ideal conditions (possible adverse outcomes) would be met in Peru:

- 1) The setting up of a Constituent Assembly.
- 2) A capital outflow as consequence of the ill-intentioned 'Brady Earthquake Predictions'.²
- 3) That a government wins the 1980 elections without international support.
- 4) That terrorist acts by Marxist-Maoist guerrillas became stronger.

At the same time, Ecuador built positions inside the unmarked 78

kilometres (48.5 miles) [of border] inside the Cordillera del Cóndor. Fortunately for Perú, all the Ecuadorian assumptions failed and they were expelled.

The Peruvian soldiers demonstrated that they are worthy heirs of the Tarapacá heroes. Through the dangerous forest they prevailed with an admirable courage, enthusiasm and discipline. In the same manner respect has to be given to the Aguarunas.³ We, the crews of the helicopters, are exceptional witnesses of your courage, which is contagious.

The crews of the aircraft and helicopters faced, with courage and decision, the vicissitudes that only pilots can appreciate in their real magnitude. During operations they displayed their preparation and patriotism. FAP aircraft and helicopter crews also faced the great operational limitation of being forbidden to cross the border to perform their attacks, in order to maintain the validity of the Rio de Janeiro Protocol.

During the two conflicts (1941 and 1981) Peruvian Air Force personnel managed to defend the territorial integrity, leaving a very important message: the slogan 'COURAGE AND PREPARATION IS DISSUASIVE', was painted on the walls of all of the airforce units across the country. The training of the crews carrying out operations in support of development projects, whether from government or commercial, guaranteed the success in military operations when it was required.

Peru made, by the force of truth and arms, the limits agreed in the Tratado de Amistad y Límites de Rio de Janeiro (Rio de Janeiro Treaty of Peace and Borders) signed in 1942 to be respected. Unfortunately, after this conflict the Guarantor Countries did not comply with their obligations making the two countries finish the placement of the missing milestones inside the 78 kilometres (48.5 miles) border gap of the Cordillera del Condor mountain range.

The publication of this book will help to persuade the authorities of all countries not to initiate a conflict due to political ambitions and selfish interests.

1

A PROTRACTED CONFLICT

The signature and implementation of the Acta de Talara on 2 October 1941, which led to the signature of the Rio de Janeiro Treaty in 1942, was seen as the agreement that would, once and for all, put an end to the territorial border disputes that had undermined the peace and good relationship between both countries for decades – as described in *Air Wars between Ecuador and Peru, Volume 1: The July 1941 War*.¹

This protocol not only contained obligations for the parties involved, but for the four guarantors – Argentina, Brazil, Chile, and the United States – too: they assumed a number of responsibilities, a shortened list of which included:

- a continued supervisory role of the guarantors until the definitive demarcation of the Ecuador-Peru border (Article 5);
- any disagreement that arose during the execution process would have to be resolved by the parties with the assistance of the guarantors;
- the Protocol empowered Ecuador and Peru, with the collaboration of the guarantors, to grant reciprocal concessions

to regulate the border according to the specific geographical conditions.

In this way, the Rio Protocol institutionalized the role of external actors in the Ecuador-Peru dispute, granting the four guarantor states a continuous role of collaboration and assistance, although the fundamental responsibility rested in Ecuador and Peru.

In June 1942, a joint demarcation committee was established for Ecuador and Peru. Shortly after, the process of the demarcation of the border started and, while this proceeded at a steady pace on the western sector of the border, demarcation in the eastern sector of the frontier was never completed. A small extension of the Ecuador-Peru border, in the remote Cordillera del Cóndor,² was left unmarked because the Ecuadorian Government, after an aerial survey, had confirmed the size and location of the Cénepa River and, unilaterally, concluded that the implementation of the Protocol in that sector was impossible due to geographical reasons.³

The agreement, however, while seemingly beneficial for the Peruvians who through it managed to fix their northern border,

remained highly unpopular in Ecuador. Not only did the political opposition claim that the country was forced to sign this treaty under occupation, and – 'worst of all' – that the Ecuadorian people had suffered a trauma that led them to reject the Protocol and not accept any territorial loss. Ecuador felt minimized in its physical size and this, of course, had an impact on the national consciousness.⁴

Rather unsurprisingly, during the early 1950s Ecuador began invoking the Protocolo de Rio agreement with the purpose of claiming the riverbank of the Marañón River or the Amazon and, with this, its status as Amazonian country. In 1951, the Ecuadorian President Galo Plaza cited this discrepancy as a justification to declare that Ecuador could never accept a final agreement that did not recognize its rights to a sovereign exit to the Amazon through the Marañón. Almost a decade later, Ecuador declared the Rio de Janeiro Treaty to be 'null and void'. On 17 August 1959, President José María Velasco Ibarra stated:

Yesterday or this morning I read in a newspaper that the Peruvian authorities demanded the fulfilment of the Rio de Janeiro Treaty. But, I ask to you: IS THAT REALLY A TREATY? MUST SOMEONE CELEBRATE A CONTRACT WITH A GUN POINTED AT THE CHEST OF THE OPPONENT? THE RIO DE JANEIRO TREATY IS NULL. We do not want war. We do not want to provoke scandals in the South American world, but we will never recognize the Rio de Janeiro Treaty. For what reason had so many international legal institutions been created? For what reason has the human species advanced? For what reason has the international law advanced? For what reason people talk about fraternity, union, solidarity?

A year later, on 28 September 1960, the Ecuadorean Ambassador to the United Nations (UN), Chiriboga, proclaimed that nullity in front of the General Assembly of the UN.

The Peruvian diplomatic response was unusually prompt. The Foreign Ministry in Lima ran intense diplomatic and public campaigns in order to prevent any of the American countries from accepting Ecuador's position. The Peruvian efforts proved successful: the so-called 'guarantor countries' (*Garantes* in Spanish) – Argentina, Brazil, Chile and the United States of America – repeatedly issued statements expressing the validity of the Protocolo de Rio, stressing:

It is a basic principle of international law that the unilateral will of one of the parties is not enough to invalidate the Treaty, or to free one or the other side from the obligations imposed upon her. Only the concordant will from both parties in agreement with an international court, can result in modifications... For these reasons, unless Ecuador and Peru do not agree otherwise, the Protocol of Rio de Janeiro, signed and ratified by Ecuador and Peru, and applied in its almost totality through acts of practical demarcation to which own parties had attributed, is a valid instrument that must be respected as such.⁵

Nevertheless, Ecuador continued claiming that the Treaty was void because it was signed under physical and material coercion – at the time the Ecuadorean province of El Oro was under occupation by the Peruvian armed forces. Therefore, as Quito – the Ecuadorean capital – was distorted under pressure, so was the will of the Ecuadorian people.

The 'Honourable Transaction' Approach

Realising there was no way to obtain support for his country's insistence on the 'Nullity Thesis', Ecuadorean President Velasco Ibarra then developed new strategy. On 27 August 1968 he stated:

We have to change our approach; we have to come to an honourable transaction. That Ecuador has a Port on the Amazon River.

Four days later, he announced to the Ecuadorean Congress:

I do not retract a single line in my statement that Ecuador, regarding the Rio de Janeiro Protocol, must go towards an equitable transaction: a Port in the Amazon. Ecuador is due justice and justice must be sought by skilful diplomacy and practice, not with utopian and foolish statements.⁶

With hindsight it is evident that this statement would subsequently turn into a major problem for the Ecuadorean diplomacy as, through adopting this line, the country had officially abandoned all of its titles and rights upon the disputed territories, and turned a problem of law into one of equity.

Successive Peruvian governments refuted the Ecuadorian claims and aspirations in the following fashion:

a) First, Peru notes that both at the time of the approval of the Protocol by the respective National Congresses of Peru and Ecuador (26 February 1942), as at the time of ratification by the heads of State, Dr. Manuel Prado y Ugarteche, as President of Peru and Dr. Carlos A. Arroyo del Río, as President of Ecuador; and at the time of the exchange of the instruments of ratification, carried out in presence of the representatives of the Guarantor Countries and the President of Brazil Getulio Vargas, in the city of Petrópolis, Brazil, (31 March 1942) did not occupy any extension of Ecuadorian territory. Effectively, on 13 February 1942 – just as provided by the Protocol's 2nd article – there was not a single Peruvian soldier in Ecuadorian territory. The signing of the Rio Protocol took place six months after the suspension of hostilities and four months after the last contact between Ecuadorean and Peruvian troops on the ground.

b) Although it is truth that Peru occupied part of the Province of El Oro at the time of the signing of this treaty (29 January) the nullity by coercion could be argued only if such an occupation had been prolonged at the time of ratification; it is known that according to International Law the complex treaties like this one, which require ratification, become legally valid at the time of the ratification and exchange of said instruments, as it was later provided in Article 16 of the Vienna Convention of 1969 on the Law of Treaties, which contains in this point the Existing international custom on the matter. Then, the Agreement was approved by the Ecuadorian Congress, ratified by its President and Foreign Minister Julio Tobar Donoso exchanged the instruments of ratification, without any element of coercion or pressure on the part of the State of Peru.

c) To all this, Peru added the presence of the four guarantor countries (Argentina, Chile, Brazil and the United States) throughout the process of negotiation, conclusion, and the implementation of the Agreement, in order to verify the non-existence of coercion against Ecuador.

To argue otherwise would not only imply a suspicion but also a serious accusation against the guarantor countries in the sense that they would have endorsed a situation of abuse and coercion, which is clearly unimaginable.⁷

The 78 Kilometre Border Gap

The suspension of the boundary marking process of 1947, left 78 kilometres (48.5 miles) of border in the Condor mountain range unmarked. By the early 1970s, this led to the unilateral decisions

by both governments to establish border posts along what each side considered to be the frontier. This in turn proved a major problem for Peru, because the topography on its side made the construction of roads nearly impossible. Indeed, it meant that the local border posts held by the Peruvian Army (Ejército del Peru, EP), could be maintained and resupplied only from the air. On the contrary, it proved possible to connect most of the posts held by the Ecuadorean Army (Ejército Ecuatoriano, EE) by gravel or even paved roads.

The position of the resulting border posts – and patrolling activity in their neighbourhood – became the reason for several armed incidents. ‘Border clashes’ were recorded in 1950, 1951, 1953, 1954,

1955, 1956, 1960 and then well into the 1970s. Another incident – and then one of the worst – took place in early 1978, when Ecuadorean and Peruvian patrols exchanged fire in several sectors along the Cénepa River and the Chiqueiza stream, in the vicinity of the observation posts (Puesto de Vigilancia, PV) Ilave and Jiménez Banda. This case was to spark the series of events that were to lead to the Ecuador-Peru War of 1981: although a high-intensity conflict, details remain largely unknown in contemporary military history. Indeed, this war is hardly ever mentioned in most general sources of reference, and if at all, then with just a single sentence or two. Providing the first-ever authoritative account of it is the primary task for this volume.

2 THE ECUADOREAN AIR FORCE, 1941-1981

The Ecuadorean and Peruvian air forces went through several periods of significant expansion and reforms after the 1941 War between the two countries. For better understanding of their capabilities and intentions as of 1981, the following chapter provides a detailed history of their operational history in the 40 years between the two wars.

US Aid for Ecuador

The outbreak of the Second World War prompted the US Government in Washington DC to intensify its diplomatic and military activities in Latin America and grant generous aid through the so-called Lend-Lease Program. Ecuador was one of the first countries to sign a corresponding agreement, in 1940, resulting in the arrival of an Air Mission of the US Army Air Corps (USAAC). In turn, the Italian Military Mission present in the country since 1937, was withdrawn. One of the next joint measures taken by the governments of Ecuador and the United States was to sign an agreement for the construction of an air base at the Galapagos Islands – strategically located along the shipping routes in the Pacific Ocean, and providing stand-off protection for the crucial Panama Canal. For this purpose, on 9 May 1940, a Douglas B-18 bomber assigned to the 44th Reconnaissance Squadron of the USAAC took off from Albrook Field in Panama. After flying south to Ecuador and landing at Quito, it picked up Captain Leonidas Hidalgo and Lieutenants Bayardo Tobar and Gonzalo García. From there, it undertook a long reconnaissance mission over the Galapagos Islands in order to identify which one was most suited for the construction of an air base. After completing this flight, the aircraft returned to Panama, where General Henry H. Arnold – USAAC Commander-in-Chief – was awaiting the crew’s report. Following careful analysis, the small island of Baltra, north of the Santa Cruz Islands, was selected as the location for the new air base. The Ecuadorian and US governments also agreed to establish a second base in Salinas, in the Santa Elena peninsula. The use of both bases would be shared by the Ecuadorian Military Aviation (Aviación Militar Ecuatoriana, AME) and the USAAC.

Meanwhile, the United States Military Mission had arrived in the country, led by Lieutenant Colonel Harry H. Renshaw and Captain Alex B. Pendleton – only to be promptly confronted with a request from Major Bavardo Tobar, commander of the AME, for the provision of training aircraft for the AME’s Aviation School at Salinas through the Lend-Lease Program. Certainly enough, in the light of the disaster of the July 1941 War, the Ecuadorean government

acquired – primarily via various arms dealers – a number of other aircraft. Correspondingly, between September 1941 and February 1942, two Seversky SEV-DS-2s, one AP-7, and one EP-1-68 from the USA.¹ These received the serials C-1 to C-4 (later FAE 200 to FAE 203) and were organized into the Fighter Squadron (Escuadrilla de Caza). Moreover, the Ecuadoreans acquired three Ryan ST-3S/PT-22, five Curtiss-Wright CW-22B Falcon, and six Fairchild PT-19A Cornells. It was only in April 1942 that the first four North American AT-6B Texans were delivered from the USA under the Lend-Lease Program and assigned to Mariscal Sucre AB in Quito. Six additional Texans, this time AT-6Cs, followed between 21 January and 14 August 1943.

AME to FAE

In December 1943 the idea of the separation of military aviation from the army began to germinate in Ecuador. Supported by the Ecuadorean Minister of Defence, General Alberto C Romero, this was soon converted into a major project. Correspondingly, and with the Executive Decree No. 2019 from 31 December 1943, the Army Aviation Inspectorate was reorganised as the Aeronautics General Command, while the Ecuadorean Air Force (Fuerza Aérea Ecuatoriana, FAE) officially came into being as an autonomous branch of the country’s armed forces. Its first commander became Major Bayardo Tobar Albuja.

One of Tobar Albuja’s first decisions was to formalise the commitment of the US Air Mission to help expand his force. This resulted in the arrival of nine AT-6Ds between September and December of 1943, and 12 Vultee BT-13s in May 1944. Moreover, during the summer of 1945 the Ecuadorean government negotiated the provision of a pair of Douglas C-47 Skytrains and twelve Republic P-47D Thunderbolts along with spare parts for these and the aircraft in service with the FAE at the time.² Commanded by Lieutenant Gustavo Izurieta, pilots and mechanics assigned to the new and powerful fighters underwent conversion training to Thunderbolts at Perrin and Luke Fields, in Texas, starting from 21 May 1946. The first P-47Ds destined for Ecuador left Kelly Field in Texas on 16 June 1947: they transferred via Veracruz (Guatemala), Managua (Nicaragua), and Panama, and reached Guayaquil on 24 June 1947. The P-47D officially entered in service with the FAE on 19 July 1947, with the First Fighter Squadron (Primer Escuadrón de Caza). Four additional Thunderbolts had been delivered by 2 May 1949, and by the end of the same year another 15 had arrived. The legendary Thunderbolt was to represent the backbone of the FAE’s combat fleet well into the early 1950s.

The first C-47Ds were delivered on 25 January 1948 and 25 March 1948. A miscellany of civilian and military variants followed (including the Douglas DC-3B-202A/C-47F-DO, which arrived on 28 April 1953). The official FAE order of battle from 16 July 1954, showed the presence of seven C-47s, sporting serials FAE 503, and FAE 505 to FAE 510.

British Period

During the first half of the 1950s, the Ecuadorean government – still led by President José María Velasco Ibarra in his third term in office – launched another modernisation of the armed forces. Supported by both the political and economic sectors, and aimed to bolster the country's position vis-à-vis Peru, this saw establishment of closer ties to the government of the United Kingdom in London. The result was the acquisition of a total of 12 Gloster Meteor FR.Mk 9 jet fighters in 1954.³ Furthermore, looking to improve its offensive capabilities, the FAE expressed interest in acquiring the English Electric Canberra bombers – which at the same time were in the process of entering service with the US Air Force (USAF) and with the Venezuelan Air Force. A related agreement between London and Quito was signed in May 1954 and envisaged the delivery of six newly-built Canberra B.Mk.6 light bombers and support equipment. Their operations in Ecuador began a year later, after the first six pilots and navigators,



The first of the Ecuadorian Air Force's eight BAC 167 Strikemasters seen during a test flight in the UK. The Ecuadorian aircraft, identified as Mk 89 by BAC, left the assembly line in 1972 and bore serials FAE 243 to 250 and codes T43 to T50 on the nose. The FAE's Strikemasters were shipped to Manta in October 1972, where they were assembled at this location, with the first flight of the type in Ecuadorian airspace taking place on January 1973. All BAC 167s were assigned to the Escuela Militar de Aviación (EMA, Military Aviation School) at Salinas. (BAe)

and 60 ground personnel were trained at the English Electric factory in Lancaster.⁴

At the time, Ecuador still maintained good relations with the USA, and thus acquired a total of 18 Lockheed F-80C Shooting Star jet fighters, and a total of eight Lockheed T-33A-1-LO/5-LOs and nine Lockheed AT-33s between November 1956 and 1965.⁵

While aircraft acquisitions proved relatively straightforward, before long the FAE was forced into the realisation that the available air bases were insufficient for the operation of jet-powered aircraft. Indeed, both Salinas and Mariscal Sucre (Quito's International Airport) had runways that were much too short. Correspondingly, in August 1955 the construction of a new base was launched in Taura, outside



The FAE ordered a second batch of eight Strikemaster T.Mk 98As in late 1973, with deliveries taking place during the next year. These Strikemasters were assigned with correlative serials FAE 251 to FAE 258 and codes T51 to T58. (Photo by Jorge Delgado)

Guayaquil. The resulting 'Fightertown Ecuador' became operational in late 1956 and ever since has formed the centre of the country's fighter jet operations.⁶

Later during the 1950s, defence spending in Ecuador shifted towards the Navy. Correspondingly, additional funding for the air force became available only after the discovery of large oil reserves in the Amazon forest in the late 1960s. Quito then promptly placed an order for British Aircraft Corporation BAC.167 Strikemaster Mk.89 jet trainers with attack capabilities. After the first group of Ecuadorian pilots completed their conversion to this system the eight aircraft were shipped to Manta in October 1972 and were assigned to the Escuela Militar de Aviación (EMA, Military Aviation School) at Salinas after arrival. The aircraft were assembled at this location and, in January 1973, the first flight of an Ecuadorian Strikemaster with an Ecuadorian crew took place. The newly arrived Strikemasters saw service during the rest of the year training the cadets of the Escuela Militar de Aviación's 24th class, but lack of experience on the type soon led to the first loss when FAE 245 crashed on 20 September of

that year, followed by the FAE 249 on 22 November. The FAE intended to increase the fleet and also replace the two lost aircraft and by the end of 1973 a second batch of 8 Mk.89As was ordered. These Strikemasters were delivered during 1974 and were assigned correlative serials FAE 251 to FAE 258 and codes T51 to T58.⁷

Dragonflies ...

Bolstered by increasing income from exports of oil and bananas, the most important acquisitions of advanced combat aircraft by Ecuador followed in the 1970s – especially during the period 1976-1979, when the country was ruled by a military junta that insisted on 'acquiring the best equipment possible'.⁸

Negotiations for the acquisition of 13 Cessna A-37B Dragonfly counterinsurgency (COIN) jet aircraft were concluded with the USA in 1975, and these entered service with the 2112nd Squadron of the 21st Combat Wing at Taura by a year later. In 1979, the Dragonflies were transferred to the Eloy Alfaro Air Base, outside Manta, where the squadron flying them was subordinated to the newly established 23rd

Combat Wing (Ala de Combate No.23).

In 1975 and 1976, the 11th Transport Wing (Ala de Transporte No.11) was reinforced through the acquisition of the first two, out of an eventual ten, Avro/Hawker-Siddeley HS.748 transports, and in 1976 the leading pair of de Havilland Canada DHC-5 Buffalos was purchased for use by the Navy and the Army. Moreover, starting in late 1977, the Higher Military Flying School (Escuela Superior de Aviación Militar) at Ulpiano Paez Air Base (AB) in Salinas was significantly bolstered through the arrival of the first out of an eventual 18 Beech T-34C Mentor basic trainers.



In 1975 the FAE took delivery of the first 13 Cessna A-37B Dragonflies under the military aid program, which were assigned with the consecutive serial numbers FAE 374 to 385 and placed under the command of Ala de Combate N°21 (N°21 Combat Wing) based in Taura AB where they served until 20 July 1979, when the aircraft were transferred to Eloy Alfaro AB in Manta as part of the Ala de Combate N°23 (N°23 Combat Wing). (Author's collection)



The FAE's light attack duo: a Cessna A-37B and a BAC 167 Strikemaster parked on the Simon Bolívar AB ramp in the late 1980s. (Photo by Jorge Delgado)

... Jaguars ...

Meanwhile, the Meteor FR.Mk.9s and Canberra B.Mk.8s acquired in the mid-1950s were almost 20 years old and showing their age. When it came to replacing them, the initial idea was for Quito to acquire British Aerospace F-4K Phantom fighter-bombers – a British-built variant of the famous McDonnell-Douglas F-4 Phantom II, the most powerful 'super fighter' of its times. However, US export prohibitions prevented such a deal, and the Ecuadoreans opted for English Electric Lightning interceptors instead – at least as replacements for Meteors.



A magnificent study of the first SEPECAT Jaguar EB during tests in the United Kingdom. The aircraft still wears the British civil registry G27-266. (BAe)



SEPECAT Jaguar EB serial FAE 283 taxiing down the runway at Warton AB in the UK after completing a pre-delivery flight. (BAe)



A SEPECAT Jaguar ES identified with serial FAE 302 flying over the Ecuadorian coast near Salinas. (BAe)

Related negotiations then stalled, prompting Quito to approach Belgium with a request for delivery of about a dozen Hawker Hunter F.Mk.6 fighter-bombers and T.Mk.7 conversion trainers, while France then became involved with an offer for Dassault Mirage 5 fighter-bombers. Eventually, nothing of this was ever realised. Instead, the FAE opted to buy the SEPECAT Jaguar GR.Mk.1 fighter-bomber (in the variant designated Jaguar International), jointly developed by France and Great Britain. The order placed in 1974 stipulated the delivery of ten Jaguar ES single-seaters and two Jaguar BS two-seaters, all powered by Rolls-Royce/Turbomeca Adour Mk.804RT172-26

engines, and the capability to carry a pair of the then brand-new Matra R.550 Magic infra-red homing air-to-air missiles on overwing pylons. Ecuador thus not only acquired its first supersonic fighter, but also a worthy replacement for both the Canberras and Meteors.⁹

The first prototype of an FAE Jaguar was put on display at the Farnborough Air show in 1975, and all the pre-delivery trials completed by the end of the year, although the actual first aircraft built for Ecuador flew only on 19 August 1976.¹⁰ In summer 1976, Majors Jaime Varela, Marco Chávez and Guillermo Chiriboga, together with Captains Ricardo Erigoyen and Alberto Naranjo, and a group



A failed attempt to purchase Kfir C-2 fighter bombers in 1978 – due to the US veto to the sale of the General Electric J-79 engines for these Israeli jets – proved beneficial for the Dassault-Breguet Aviation corporation which was able to secure an order for 18 Mirage F1s, 16 single seat fighters and two twin-seat trainers for the FAE. (Photo by Jorge Delgado)



A pair of Dassault Mirage F1JE trainers were delivered to the FAE in the summer of 1980. These aircraft were originally assigned with the serials FAE 817 and 818. (Photo by Santiago Rivas)

of ground personnel, travelled to RAF Lossiemouth for conversion training with No. 226 Operational Conversion Unit (OCU). The first two Ecuadorean Jaguars – the single-seater with the serial FAE 289, and the two-seater FAE 283 – were ferried by British pilots to Taura AB on 14 January 1977. They were pressed into service with the 2111th Fighter Squadron, meanwhile assigned to the Fighter Group 211 (Grupo de Combate No. 211) of the 21st Fighter Wing, commanded by Major Jaime Varela. Ironically, the Jaguars thus replaced not only the Meteors and Canberras,

Table 1: Order of Battle, FAE, January 1981

Unit	Base	Area	Aircraft
21st Fighter Wing/Ala de Combate 21			
Fighter Group 211/Grupo de Combate 211			
Fighter Squadron 2111 (Escuadrón de Combate 2111)	Taura AB	Taura	12 SEPECAT Jaguar ES/EB fighter-bombers
Fighter Squadron 2112 (Escuadrón de Combate 2112)	Taura AB	Taura	18 Dassault-Breguet Aviation Mirage F-1JA fighters
22nd Combat Wing/Ala de Combate 22			
Combat Squadron 2211 (Escuadrón de Combate 2211)	Simon Bolivar AB	Guayaquil	AS.316 Alouette III, Bell 212 and Bell 47G helicopters
Combat Squadron 2212 (Escuadrón de Combate 2212)	Simon Bolivar AB	Guayaquil	
23rd Combat Wing/Ala de Combate 23			
Combat Squadron 2311 (Escuadrón de Combate 2311)	Eloy Alfaro AB	Manta	12 Cessna A-37B attack aircraft
Air Combat Command/Comando Aéreo de Combate			
Escuadrón de Combate 1112	Mariscal Sucre AB	Quito	6 BAC Canberra B.Mk.6 (3 operational)
Escuadrón de Combate 2113	Taura AB	Taura	16 BAC 167 Strikemaster 89/89A
Escuadrón de Transporte 1111	Mariscal Sucre AB	Quito	8 Lockheed L-100-30 and C-130B/H Hercules
Escuadrón de Transporte 1112	Mariscal Sucre AB	Quito	10 Hawker Siddeley HS-748 Avro
Escuadrón de Transporte 1113	Mariscal Sucre AB	Quito	9 de Havilland DHC-6 Twin Otter
Grupo de Rescate 221	Taura AB	Taura	2 SA-316A Alouette III (serials 301-303)



FAE took delivery of at least 22 Beech T-34A/C Mentor trainers beginning in 1962, assigning them to Escuela Superior de Aviación Militar at Ulpiano Paez AB in Salinas. A number of these weapon-capable aircraft were deployed to Simón Bolívar AB in Guayaquil in order to take part in ground attack duties near the border. (Photo by Jorge Delgado)

but also the relatively new A-37Bs, which had – even if only temporarily – replaced the 2111th Fighter Squadron's Meteors to act as interceptors.¹¹

... and Mirages

The economic boom experienced by Ecuador during the mid-1970s enabled the junta in Quito to continue expanding the FAE's arsenal through launching a third major acquisition project, this time aiming to – finally – replace the hopelessly obsolete Meteors, and as a match for the Dassault Mirage 5 delta-winged jets meanwhile acquired by Peru. The initial idea was to place an order for 12 Northrop F-5E Tiger II fighter-bombers in the USA. However, the efforts were blocked by the US State Department for political reasons. Similarly, and as mentioned above, the attempts to buy second-hand Lightnings from the RAF and Hunters from Belgium all failed. Finding no other solution, in 1978, Ecuador opted to order 24 Israel Aircraft Industries Kfir C.2 fighter-bombers worth US\$150 million in Israel. As so often, this effort was spoiled by the USA, which vetoed the sale of jets powered by US-made General Electric J-79 engines. This was the proverbial 'final straw': blocked in their efforts to acquire armament 'made in the USA', the Ecuadoreans decided to follow the Peruvian example and approach France for high-performance interceptors. Unsurprisingly, considering the rather aggressive sales policies of the contemporary government in Paris, the French reacted as positively as quickly – even



Aviación del Ejército del Ecuador, also known as Grupo Aéreo del Ejército (Army Air Group) took delivery of at least two de Havilland DHC-5D Buffalo in November 1980. These aircraft saw active service during the conflict as part of the Escuadrón de Transporte from Grupo Aéreo N°45. (Photo by Jorge Delgado)



Ecuador received at least three Lockheed C-130H Hercules transport aircraft between 1977 and 1979 which flew as part of the Escuadrón de Transporte Pesado 1111, operating from Mariscal Sucre AB in Quito. (Photo by Jorge Delgado)

more so because the FAE concluded the type as superior to the Kfir. A contract for the acquisition of 18 Dassault Mirage F.1 fighter-bombers (including 16 single- and two two-seaters) was negotiated and signed within the shortest possible period of time.

On 11 August 1978, a group of officers from the recently activated Fighter Squadron 2112 travelled to France to undergo a 5-month ground-instruction course on the Mirage F.1. After completing this phase of their training, on 29 January 1979 they moved to Orange AB



declared operational on the type on 28 June 1979.

Overall, although deliveries of several aircraft were still pending, and many crews were still undergoing their advanced training, by 1980 the FAE thus operated a well-balanced mix of recently acquired fighter jets, most of which were equipped to the latest standards available in the West. The resulting force was organised as listed in Table 1.

Support Units

While the above-listed acquisitions of the mid-1970s caught most of the public attention, other branches of the Ecuadorean armed forces were also in the process of buying advanced equipment. Foremost amongst these was the Army Aviation, which not only bought a pair each of Bell 212s (serials E-450 and E-451) and Aérospatiale SA.315 Lama helicopters, but also a single Aérospatiale SA.330 Puma (serial AE-456). Grouped into a single unit based at Simón Bolívar AB, outside Guayaquil, they were used intensively to ferry personnel and equipment to the outposts along the border with Peru – especially so in the Condor mountain range. The same was true for five IAI.101 Arava light transports operated by the Grupo Aéreo No.44 ‘Pastaza’, from Shell-Mera Army Aviation Base, outside Tarqui, in eastern Ecuador.

Finally, the Ecuadorean Navy was meanwhile operating its own flying branch – the Ecuadorean Naval Aviation. Led by Commander (Navy) High Staff (Capitan de Fragata Estado Mayor, CPFG-EM) Yesid Jara



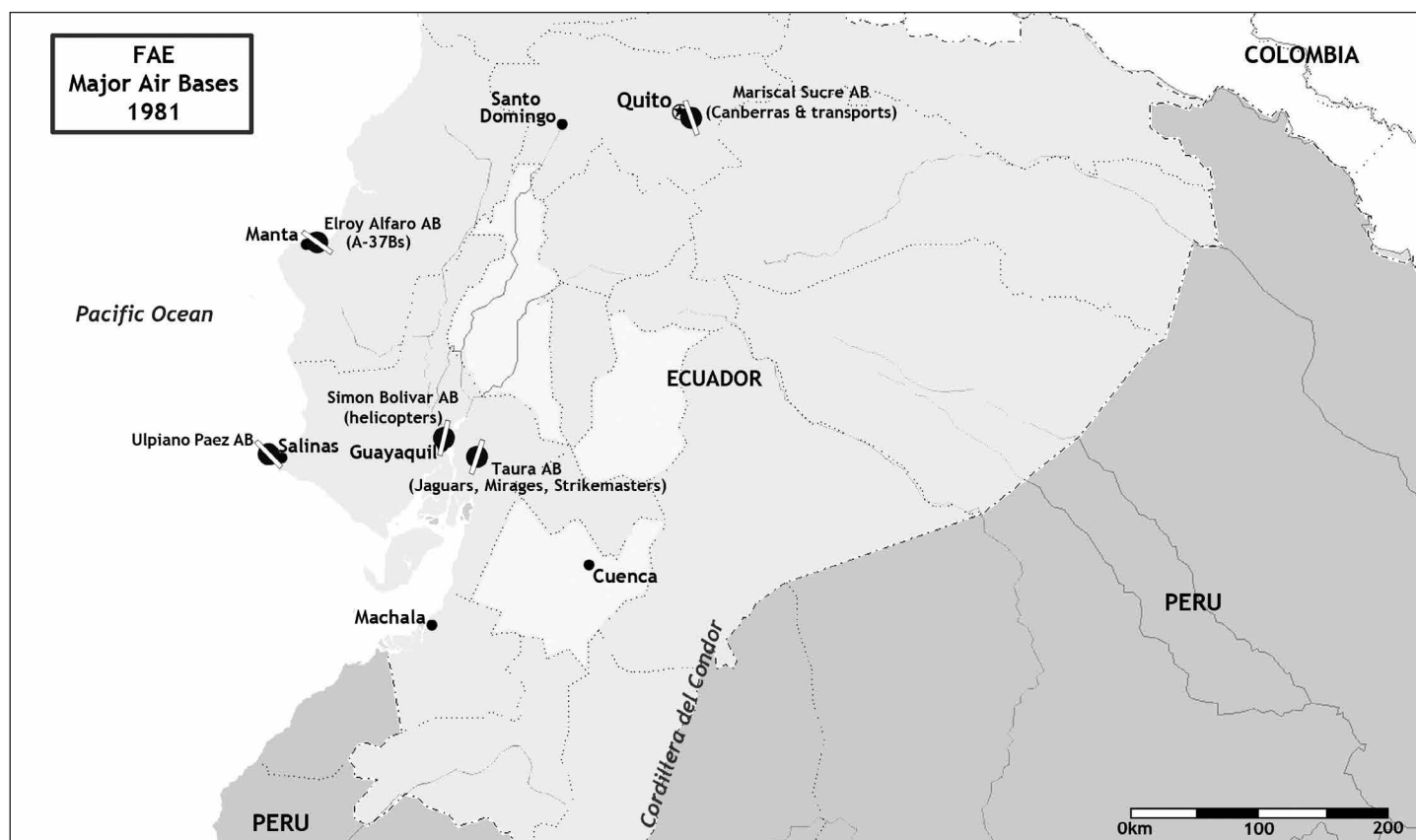
One of the three Beech T-34C Turbo Mentors belonging to the Escuadrilla de Entrenamiento (Training flight) from Estación Aeronaval at Manta. During the conflict these aircraft were deployed to the Estación Aeronaval at Guayaquil to provide with patrol duties over the Gulf of Guayaquil in search of Peruvian Navy submarines. (Photo by Jorge Delgado)

Table 2: Serial Numbers of FAE's Fighter Jets, 1981		
Aircraft Type	Serial Range	Notes
Strikemaster Mk.89	FAE 243 – FAE 250	FAE 245 and FAE 249 written off in 1973; FAE 247 written off in 1980
Strikemaster Mk.89A	FAE 251 – FAE 258	FAE 255 and FAE 256 written off in 1979
Strikemaster Mk.90	FAE 259 – FAE 264	
A-37B	FAE 374 – FAE 386	
Jaguar	FAE 280, 302, 309, 318, 327, 329, 340, 348, and 349	
Jaguar T	FAE 283, 305	
Mirage F.1JA	FAE 801 – FAE 816	FAE 804 written off in June 1980
Mirage F.1JB	FAE 817, FAE 818	

to start flight training. Avions Marcel Dassault rolled out the first four F.1JAs (serials FAE 801 – FAE 804) on 13 February 1979, and one of them made its maiden flight on the same day, also from Orange AB.

Following intensive training, Ecuadorean pilots were declared operational on the new type in early April 1979, by which time each of them completed a total of 20 training flights, and on 27 April 1979, they and the ground personnel returned to Taura AB. The first Ecuadorean Mirage F.1AJ followed in May 1979: after delivery by ship and subsequent assembly, the aircraft was flight-tested for the first time on 26 June of the same year. Following deliveries of additional aircraft, the Fighter Squadron 2112 (*Escuadrón de Combate 2112*) was

Millo Santos, this operated Aérospatiale SA.316 Alouette IIIs from Manta AB, from where they flew supply missions on behalf of diverse detachments along the coast. Moreover, the Training Squadron (*Escuadrilla de Entrenamiento*) operated a trio of Beech T-34C Mentors (serials 221, 223 and 225) for anti-submarine patrols from Simón Bolívar AB in Guayaquil, as did FAE's T-34Cs from Ulpiano Paez AB, outside Salinas.¹²



A map of all air bases and other major airfields in Ecuador as of 1981. (Map by Tom Cooper)

Ecuadorean Canberras

The Canberra B.Mk 8s ordered by Ecuador were equipped almost exactly like the B.Mk 6s made for the Royal Air Force (RAF). Correspondingly, English Electric quickly incorporated them into the existing production schedule and the first two were already ready for delivery in early 1955. Flown to Ecuador in pairs, all six arrived by the end of the year, to enter service with Bomber Squadron 2123 (Escuadrón de Bombardeo 2123) at Quito.

Having entered in production in 1954, the B.Mk.6 was – essentially – an improved B.Mk.2 featuring a 2,045 litre (540 US gallons) integral fuel tank located in the outer section of each wing (ahead of the main wing spar) and new Rolls Royce Avon Mk.109 engines with a thrust of 3,410 kilograms each. With its fuel capacity of almost 12,680 litres (3,349.70 US gallons), the B.Mk.6's range increased to 5,440 kilometres (3,380 miles), while the new, more powerful engines provided the aircraft with a maximum speed at high altitude of 930 kilometres (578 miles) per hour.

During their service with the FAE, the Ecuadorean Canberras underwent an unusually complex re-serialling process. Originally, all wore just a three-digit serial number on the fin. Subsequently, this was retained on the fin, but repeated on the nose with the prefix 'BE'. Later on, a new numbering system including the construction number was introduced: this was displayed on the nose in full, while the 'last three' and the prefix B were shown on the fin. Correspondingly, and for example, the BE-801 became 71390/BE-390.

In the 1970s the Ecuadorean Canberras also served as conversion trainers for future Jaguar-crews. As of 1981, only three were considered as fully mission capable (FMC).

Table 3: Ecuadorean Canberra B.Mk 8s

Aircraft	Construction Number	1st FAE Serial	2nd FAE Serial
Canberra B.Mk 8	71390	801	BE 390
Canberra B.Mk 8	71391	802	BE 391
Canberra B.Mk 8	71402	803	BE 402
Canberra B.Mk 8	71405	804	BE 405
Canberra B.Mk 8	71411	805	BE 411
Canberra B.Mk 8	71409	806	BE-509

THE PERUVIAN AIR FORCE, 1941–1981

Immediately after the July 1941 War with Ecuador, the overall condition of what was then the Peruvian Aeronautic Corps (Cuerpo Aeronáutico del Perú, CAP) was rather inauspicious. The onset of the Second World War resulted in a force that was primarily equipped with Italian material being cut off from its primary source of spare parts, especially engines. Moreover, in an effort to maintain independence, in the summer of 1941 the Fábrica Nacional de Aviones Caproni Peruana S.A. (Caproni National Aircraft Factory, FNACP), a subsidiary of Aeroplani Caproni S.p.A. established in Lima, split from the parent-company. The Peruvian government then decided to nationalise the FNACP: in this way it promptly shelved numerous ongoing projects for the provision of material to the CAP, including the plan for local production of Caproni Ca.602 trainers, Caproni-Vizzola F.5 fighters, and Caproni Ca.135 bombers. With the flow of spares being cut off, the Aeronautic Corps' operations were severely curtailed – even more so because numerous aircraft either sustained combat damage or were simply worn out by intensive operations.

Unsurprisingly, by early 1942, the CAP was forced to withdraw – indeed: to definitely retire – nearly all of its aircraft of Italian origin, and this just at the time that Latin America was about to become embroiled in the Second World War. Left without alternatives, the government in Lima turned to the USA for help.

Cooperation with the USAAF

In late September 1941, Lima and Washington signed a treaty on defence cooperation and technical assistance. This marked the beginning of a new era in Peruvian military history, ending the doctrinal influence set by the range of European missions that had influenced Peruvian aviation during the previous decades. As part of this agreement, a US aeronautical mission arrived in Peru with the mission to train and advise the CAP. Led by US Marine Corps Colonel James T. Moore, the mission was composed as follows:

USMC Colonel Stanley T. Barker – Director for civilian construction.

USMC Colonel J. Wisler USN – Aviation Health Director.

USMC Lieutenant Colonel J.F. Plachta – Director for the Arsenal Central de Aeronáutica¹ and the air depot.

USMC Commander Thomas B. White – Chief Director of the office for services, communications and weather.

USMC 1st Lieutenant Frederick O'Connor – Arsenal Central de Aeronáutica coordination office Chief.

USMC 2nd Lieutenant Carmen Caprio – Gunnery instructor.

USMC Technical teacher George Athon – Head of the Electricity and Services for Arsenal Central de Aeronáutica.

Table 4: EAM Aircraft, 1941

Type	Number
Vought O2U-3B Corsair	2
Vought O2U-1E Corsair	1
Curtiss Model 51 Fledgling	2
Curtiss Model 35A Hawk II	3
Fairey Seal	4
Fairey Fox	3
Douglas O-38P	2
Hanriot H.438	1
Caproni Ca.100PR	9
Caproni Ca.111	4
Caproni Ca.114	6
Caproni Ca.310 Libeccio	4
Curtiss Model 37F Cyclone Falcon	2
Morane Saulnier M.S.316	3
Travelair E-4000	1

As most of the facilities of the Military Aviation School (Escuela de Aviación Militar, EAM) were seriously damaged during the May 1940 earthquake, the High Command CAP decided to order the construction of entirely new main base for the aviation school's operations, with the foundation stone for the new buildings being laid on 23 September 1941. The state of the EAM's fleet required at least as much attention, then by the end of 1941, the crucial training unit of the Peruvian Aeronautic Corps was still operating a sizeable number

of obsolete types, stocks of spares for which were constantly dwindling (for a list of aircraft operated by the EAM as of late 1941, see Table 4).

Of course, the treaty on defence cooperation and technical assistance with the USA opened the doors for progressive influx of a large number of training aircraft. Indeed, already by September 1941, the USA provided the following machines to the EAM:

- 1 Vultee Model 54A Valiant²
- 12 Vultee Model 74B Valiants³



On 21 July 1947 the Cuerpo Aeronáutico del Perú took delivery of a sizeable quantity of aircraft under the auspice of the Mutual Defense Assistance Program (MDPA). Among the aircraft delivered were eight B-25J and 25 Republic F-47D fighter-bombers. MDPA aimed to provide Latin American countries with new equipment to replace that acquired through the duration of the war-time Lend-Lease program. (IEHAP)

- 20 Curtiss Wright CW-22 Falcons ⁴ and
- 18 Boeing PT-17 Kaydets.

CAP during the Second World War

The Japanese surprise attack on Pearl Harbour on 7 December 1941 brought the Second World War 'dangerously close' to America. Indeed, concerned about a possible Axis attack on the country's strategic assets, like the oil refineries at Talara and Callao, the government in Lima vowed to boost its military strength. One of the first resulting measures was the development of an 'emergency plan', aimed to halve the time required to train new pilots. The first of the 'accelerated' classes thus graduated by 12 August 1942, followed by another on 29 December of the same year.⁵

On 24 April 1942, the Peruvian and US governments' representatives held a meeting in which they signed a 'hemispheric' defence cooperation agreement, aimed to increase the integration level between the armed forces of both countries in the event of a foreign attack. According to that agreement, the US committed itself to offer military advice and military aid to the Peruvian armed forces in order to increase their operational capabilities. On the other hand, Peru committed to provide the US forces with two operational bases inside its territory, one in the north and the other in the Amazon rainforest, from which US forces would perform operations on this side of the hemisphere. This agreement resulted in the construction of the El Pato AB, outside Talara, and the modern airfield at Iquitos, in the Amazon.

New Combat Aircraft

In January 1942 the CAP took delivery of the first six Curtiss CW-22B Falcon training and observation monoplanes, followed by a similar quantity in February and, finally, the last eight during March of the same year. These machines were distributed between 15 Ground Observation Squadron (15 Escuadrón de Observación Terrestre, EOT), 35 EOT and the newly activated 28 Instruction Squadron (28 Escuadrón de Instrucción, EI). These were followed by nine North American AT-6Bs that arrived on 9 April as a part of the purchases made by the Peruvian Government through the Lend-Lease Military Assistance program.^{6,7}

USAAC personnel led by First Lieutenant William H. Turner, flew these aircraft (identified with provisional CAP serials 1 to 9), from Kelly Field in Texas to Teniente Coronel Pedro Ruiz Gallo AB in Chiclayo. After delivery, these machines were assigned to 13 Attack and Information Squadron (13 Escuadrón de Información y Ataque,

EIA) stationed in Chiclayo. The AT-6B was an armed version of the AT-6 Texan trainer, fitted with a pair of fixed .30-calibre machine guns in the wings and an identical calibre weapon on a flexible mount in the rear cabin, plus a pair of underwing bomb racks capable of carrying up to 180 kilograms (397 pounds) of bombs.

The sheer obsolescence of the Caproni Ca.114 and NA-50 fighters, as well as the cancellation of plans for the local production of Caproni Vizzola F.5 fighters left the CAP with an urgent need for modern aircraft to equip the CAP.⁸ After numerous fruitless attempts to acquire modern fighter aircraft in May 1942 the US Congress finally approved the transfer of a batch of 30 Curtiss H75A-8 fighters, as part of the Military Assistance program.⁹ By virtue of the agreement, the US thus committed themselves to inspect and repair/refurbish, as required, all of the second-hand aircraft.¹⁰ In order to supervise this process, the CAP organized and sent a group of officers and technicians to Kelly Field airbase in San Antonio, Texas, where the Central Loan and Lease Service Station as well as the USAAF aviation depot was based.

In regards of the aircraft provided by that date, the Curtiss H75A-8 was the final, radial-engine-powered version of the legendary P-40 Warhawk, and as such the fastest and most capable of this family (thanks to its Wright R-1820G-205 Cyclone engine, producing 1,200hps, it could reach up to 516km/h (320mph) at an altitude of 4,600 metres (15,091ft). On the negative side, however, its large powerplant restricted forward visibility, whilst the powerful torque made take-offs tricky for all but the most seasoned pilots. On the other hand, the Douglas 8A-5 was an improved version of the model that the CAP had been operating since 1939, also powered by the same 1,200hp Cyclone engine. The increased engine output allowed for a greater payload capacity of up to 1,000 kilograms (2,205 pounds), as well as the fitting of two .50-calibre machine guns in under-wing pods.

The CAP received its first six H75A-8s on 12 September 1942, when they were flown from Kelly Field, in Texas, via San Antonio, Brownsville, Veracruz, Tapachula, Managua, David, Rio Hato, Cali, and Talara to Lima – a voyage of more than 3,700 miles covered in 29 hours and 45 minutes – without any incidents. After their arrival, the fighters were assigned to the recently activated 11 Fighter Squadron (Escadrón de Caza, EC), based at Capitán Victor Montes AB, outside Talara.¹¹ On 1 November 1942, the first thirteen aircraft were followed by another nine (also delivered by air): this batch was sent to the Arsenal de Aeronáutica for inspection and re-painting, and were subsequently distributed between the 11 and 21 ECs.



A total of eight second-hand North American B-25J Mitchell bombers were included in the assistance package to the CAP. These aircraft saw service with the 21 Escuadrón de Bombardeo, where they replaced the long-gone Caproni Ca.310 bombers. (IEHAP)

Aeronautics Ministry

Despite US help, the status of the CAP was still that of a 'subordinate' branch of the Peruvian armed forces. The birth of the Peruvian military aviation as a truly independent entity was thus marked only on 27 October 1941, when the government created the Aeronautics Ministry (Ministerio de Aeronáutica, MA). Due to budget restrictions, the new branch of the civilian administration could launch its operations only on 2 February 1943: a day later, General Fernando Melgar Conde was appointed as the first Minister of Aeronautics (Secretario de Aeronáutica).

In order to fulfil the requirements established by the Air Force defensive dispositive from 1937 and thanks to the arrival of new aircraft under the auspice of the Lend-Lease program it was possible to activate a number of units that were, to that date, keep inactive due to a lack of aircraft. Correspondingly, the Supreme Resolution (Resolución Suprema) from 23 April 1943 ordered the creation of the 21 EC and the 33 EIA. The 21EC became the second unit equipped with H75s, while the 33EIA was subsequently to receive six North American NA-84/AT-6B Texans.

On 17 February 1943, a formation of six Vultee BT-13B intermediate trainers landed in Las Palmas after completing a journey that started two days before at Kelly Field in Texas. These were followed on 3 April 1943 by six additional aircraft delivered in the same manner. The trainers, acquired by the Peruvian Government through the Military Assistance Program, were assigned to the 28 EI and, for a short time, to the 23 EIA – both based at Las Palmas, where they joined the sole Vultee BT-13 prototype sold to Peru in late 1940.¹²

On 16 November 1943, a formation of ten Curtiss H75A-8 fighters and 13 Douglas 8A-5 attack aircraft left Kelly Field bound for Lima.¹³ Led by Lieutenant-Commander Luis Cayo Murillo, the crews from 21 EC and 23 EIA flew along the route via San Antonio, Brownsville, Veracruz, Tapachula, Managua, David, Rio Hato, Cali, and Talara to Lima. Three days later, the formation safely landed at Las Palmas after completing a total of 29 hours and 45 minutes flight time facing every type of atmospheric conditions on their way.

The 1944 saw the delivery of additional aircraft. On 19 June, a large formation of aircraft – composed of 25 Fairchild PT-19 primary trainers and 3 Curtiss H75A-8 fighters – landed at Las Palmas AB after completing a ferry flight that started in Kelly Field three days before. A few months later, on 19 December 1944, ten brand-new North American AT-6D Texans of a formation led by Commander Salvador Nova Ferre arrived in Las Palmas after completing a transfer which had begun on 29 November at Kelly Field.¹⁴

Further deliveries continued through 1945. Nine Cessna UC-78B Bobcat twin-engine trainers – all piloted by Peruvian officers led by Lieutenant-Commander Enrique Ciriani Santa Rosa – arrived in Las Palmas early on 12 January. These aircraft had been acquired by the Peruvian government within the military assistance program at the end of 1944, for a total amount of US\$325,260. Nearly two months later, on 13 March, a formation of 15 AT-6D Texans led by Commander Enrique Bernales Bedoya, arrived in Las Palmas after completing a 3,700 kilometre (2,300 miles) flight from Kelly Field. The aircraft were purchased for a total price of US\$653,058 and, with their arrival, the number of AT-6s in service with Peruvian military aviation reached 25 units.

Territorial Organisation

One other important development related to the CAP of this period was the decision of the Aeronautical Corps' High Command from back in 1939 to divide Peruvian territory into four 'Aerial Regions'. Due to other developments, the related planning advanced rather

slowly, until February 1942, when the demarcation and assignment process were finalised, as follows:

- A) 1st Air Group (Primer Agrupamiento Aéreo): headquartered at Teniente Coronel Pedro Ruiz Gallo AB, outside Chiclayo, this sector was in control of the airspace over northern Peru. Its further air bases were Capitán CAP Victor Montes and Capitán CAP Guillermo Concha Iberico, outside Talara and Piura, respectively. The units assigned to the 1st Air Group were:
 - 11 Escuadrón de Caza, equipped with 14 Curtiss H75A-8
 - 12 Escuadrón de Bombardeo, equipped with 9 Caproni Ca.310 Libeccio
 - 13 Escuadrón de Información y Ataque, equipped with 9 North American AT-6B
 - 14 Escuadrón de Transporte, equipped with five Caproni Ca.111
 - 15 Escuadrón de Observación Terrestre, equipped with six Curtiss Wright CW-22B Falcon¹⁵
- B) 2nd Air Group (Segundo Agrupamiento Aéreo): headquartered at Las Palmas AB, outside Lima, this sector was responsible for protection of the coastline and shipping off the coast of Peru. Its further air bases were Capitán Humberto Torres Matos and Alférez Carlos Huguet, outside Limatambo and Ancón, respectively, and it controlled the following flying units:
 - 21 Escuadrón de Caza, with a total of 14 Curtiss H75A-8
 - 23 Escuadrón de Información y Ataque, with 14 Douglas 8A-5N and 2 Vultee BT-13B
 - 26 Escuadrón de Caza y Observación Maritima, with 3 Vought V-80P Corsair and 4 Curtiss Model 37F Falcon
 - 29 Escuadrón de Comando, with 3 Curtiss BT-32 and a single Grumman G-21 Goose
- C) 3rd Air Group (Tercer Agrupamiento Aéreo): headquartered at Mayor Guillermo Protzel del Castillo AB, outside Vitor, this sector was responsible for the defence of southern Peru. It controlled airfields at Tacna, Puno, Juliaca, and Moquegua, and the following units:
 - 31 Escuadrón de Información Estratégica y Ataque with 9 Douglas 8A-3P
 - 35 Escuadrón de Observación Terrestre, with 6 Curtiss Wright CW-22B Falcon
- D) 4th Air Group (Cuarto Agrupamiento Aéreo): headquartered at Teniente Gustavo Cornejo AB, outside Iquitos, this sector was responsible for the protection of the Amazonas territories and had the following units under its control:
 - 81 Escuadrilla de Combate, with 4 Curtiss Model 37F Falcon
 - 54 Escuadrón de Transporte, with a single Curtiss C-3R, 2 Stinson-Faucett F.19, 2 Grumman G-21 Goose

From March 1942, and as part of the cooperation agreements with the USA, Great Britain, Canada and Argentina, groups of CAP officers underwent advanced courses at educational facilities abroad. This program was to last more than a decade and resulted in the provision of high-standard training to hundreds of Peruvian officers and others ranks.

Overall, by 1945, the CAP was a well-equipped and consolidated force, endowed with its own legal status – even if relatively modest in regards of the quality of its combat equipment. Its organisation as of the time, is listed in Table 5.

Table 5: Peruvian Aeronautic Corps, Order of Battle, 1945			
Region	Unit	Base	Aircraft
HQ: Ministry of Aeronautics, Lima			
1st Air Region			
	11 EC	Capitán Victor Montes AB (Talara)	H75A-8
	12 EB	Teniente Coronel Pedro Ruiz Gallo AB (Chiclayo)	inactive
	13 EIA	Teniente Coronel Pedro Ruiz Gallo (Chiclayo)	AT-6B
	14 ET	Teniente Coronel Pedro Ruiz Gallo AB (Chiclayo)	Ca.111
	15 EIT	Capitan Guillermo Concha Iberico AB (Piura)	CW-22B
2nd Air Region			
	20 EE	Capitán Leonardo Alvaríño Herr AB (San Ramón)	1 G-21, 1 F.19
	21 EC	Teniente Humberto Torres Matos AB (Limatambo)	H75A-8
	23 EIA	Las Palmas AB (Lima)	8A-5
	24 EIT	Capitán Leonardo Alvaríño Herr AB (San Ramón)	Inactive
	26 EIM	Teniente Carlos Huguet AB (Ancón)	3 V-80P, 4 Mod.37F
	28 EI	Las Palmas AB (Lima)	2 BT-32, 1 G-21
	29 EC	Teniente Humberto Torres Matos AB (Limatambo)	inactive
	41 ET	Teniente Humberto Torres Matos AB (Limatambo)	Inactive
3rd Air Region			
	31 EIA	Mayor Guillermo Protzel del Castillo AB (Vitor)	9 8A-3P
	35 EIT	Mayor Guillermo Protzel del Castillo AB (Vitor)	6 CW-22B
4th Air Region			
	54 EIT	Teniente Gustavo Cornejo AB (Iquitos)	1 C-3R, 2 F-19, 2 G-21
	81 EC	Teniente Gustavo Cornejo AB (Iquitos)	3 Mod.37F

- B-25J Mitchell
- P-47D Thunderbolt
- AT-7 Navigator
- AT-11 Kansan
- C-47 Skytrain
- OA-10 Catalina
- L-5 Sentinel

This program was completed after four months of intense work: officers and others ranks that completed it successfully graduated on 16 November at the grounds of Teniente Humberto Torres Matos AB. Meanwhile, a large number of combat and combat-support aircraft began to arrive in the country. On 3 March 1946, a trio of Beech GB-2 biplanes landed at Las Palmas AB after their transfer flight from Albrook AB, in Panama. A few months later, they were complemented by a pair of Beech D-17S. On 30 July, the CAP then took delivery of its first three Lockheed PV2 Harpoon twin-engine bombers, which arrived along with the first nine – out of 32 – Fairchild PT-26 Cornell trainers.

As mentioned above, the strategic importance the Amazon forest – and its vast resources – became obvious in 1942, when the construction of the airport outside Iquitos began. Once the war was over, the presence of foreign military personnel in this area lost its purpose and the US transferred this installation – together with the recently

ARP, MDAP, and FAP

After the end of the Second World War, and in accordance with the Subsection 1, clause 2G of the Defence and Cooperation Agreement signed in April of 1942 between the US and Peruvian governments, the USA were to hand over all the military installations in Peru, while in turn providing military support through the American Republics Program (ARP) – which replaced the Lend-Lease Program. The ARP enabled a progressive supply of relatively modern material within the scheme designated by the USAAF General Henry 'Hap' Arnold. However, the ARP was quickly replaced by the Mutual Defence Assistance Program (MDAP): under this bilateral agreement, the Peruvian armed forces were to be provided with extensive amounts of armament and ammunition but were to use these for defence purposes only. It was under such conditions that the CAP was to receive a major 'arms package', starting in June 1946. First, and according to Ministerial Resolution No.858, the Aeronautics Ministry launched the re-training program called Plan Renovación (Renewal Plan), by deploying nearly 100 flying officers to El Pato AB, outside Talara, to be trained by USAAF personnel in the use of the following aircraft:

expanded seaplane bases at Itaya River – to the Peruvian government on 26 April 1946. In this way, the CAP also acquired a pair of Consolidated PB-5 Catalina amphibians, with eight spare engines, worth US\$100,000.

Similarly, after nearly four years of being operated by the USAAF, the El Pato AB outside Talara (and about four miles away from Capitán Montes AB) was handed over to Peru on 29 October 1946. On the same occasion, the US government authorised the transfer of eight B-25J light bombers and 25 F-47D-30RA fighter-bombers – together with associated tools and ground equipment, support vehicles, spare parts, and ammunition – to Peru. The aircraft were all second-hand and required inspections and repairs before they could be pressed into service with the CAP, but the US authorities took care to complete the necessary work by May 1947.

On 12 December 1946, the CAP received the first two out of an eventual 14 Beech JRB1 (C-45) Expeditor light transports, and on 21 May also six additional PV2 Harpoons and 23 PT-26s. As usual, all were second-hand aircraft, but they at least underwent complete overhaul before delivery. On 21 July 1947, the US handed over five Stinson L-5E Sentinel observation and liaison aircraft to Peru, and –

following inspections and necessary repairs – also eight B-25Js and 25 F-47Ds. In the course of a related ceremony at El Pato AB, a pair of AT-7C Navigators, three PBY-5 Catalinas, five AT-11 Kansans and a similar number of L-5Es were also officially transferred to the CAP.

The availability of so many aircraft prompted the Peruvians to replace old Ca.310s of the 21 EB in Chiclayo with B-25Js, while the Thunderbolts went to serve with the 12 EC at Talara. Moreover, encouraged not only by the US aid, but by a development in the structure of US forces, on 18 July 1950 the Government of Peru issued the Legislative Decree 11741, ordering the official establishment of the Peruvian Air Force (Fuerza Aérea del Perú, FAP).

Crisis of the Early 1950s

By the summer of 1952 attrition rates had nearly crippled the operational capacity of many of the units from the recently reorganized Peruvian Air Force. Particularly critical was the situation of the 21 EB whose fleet of old B-25J had been reduced, thanks to operational accidents, wear and tear, and lack of spare parts, to only three machines towards the beginning of the year. In April 1952 the FAP high command issued a requirement to the US government, through the Military Assistance and Reimbursable Basis Program (MRAP), for the delivery of eight North American B-25Js, 25 North American AT-6G Texans, seven C-45 Expeditors as well as bombs, rockets and other ammunition. The US Department of Defence (DoD) responded negatively to this request alleging that there were no remaining stocks of the requested aircraft left in storage at that time. Nevertheless, the DoD started preparations for the shipment of 31 Republic F-47Ds to Peru, as well as the study of availability and costs for the requested ammunition. This way, the FAP was forced to seek solutions to its requirements on the civil market, managing to acquire a total of 15 C-45s and 21 AT-6Gs.

Peru, however, was not the only Latin American country seeking to replace the material obtained during the war years via Lend-Lease and ARP programs. Therefore, the DoD, making echo of the progressive geopolitical changes and the potential entry of other actors into the Latin American aeronautical market, issued a modification to the military assistance programs, creating the so-called Grand Aid (GA) projects. Through this, the needs and capacities of the countries aspiring to obtain aid were carefully evaluated in order to assign aircraft in appropriate quantities in accordance to the DoD criterion. It is worth mentioning that in the inspection, repair – where necessary – as well as the delivery of the airframes to pre-established points, was included in the aid package without any significant additional cost.

During the first half of the fifties, the open opposition against the expansion of communism in Latin America displayed by President General Manuel A. Odría (1948-1956) made him a friendly figure to the politicians in Washington, who favoured commercial exchange between the US and Peru. Odría, one of the leading commanders of the EP forces during the 1941 conflict, argued that any confrontation between the Western and Eastern Bloc would lead to the uprising of communist sympathizers in the Americas, which could result in the overthrow of some Latin American governments and the consequent establishment of 'hostile' countries. This led Odría to declare that states 'aligned' with the US foreign policy – as was the case with Peru – should have strong armed forces capable of dealing with both internal and external threats. On that basis, Odría sought to acquire combat jets and tactical bombers through the auspice of the MDAP program. The DoD, however, still in the process of refining the Grand Aid programs – and not less cautious when deciding the sale of 'advanced' weaponry to Latin American countries – refused to deliver any combat jets to Peru, clearing the delivery of only a batch of

CAP's Serialling System of the 1940s

In early 1946, the Aeronautics Ministry of Peru introduced a major change in the way the aircraft of the CAP were marked. Influenced by the system employed by the USAAF, the new system replaced the one introduced in 1939 (influenced by the Italians): it included seven numerical blocks, each indicating the purpose of the aircraft in question, as listed in Table 6. This was slightly adapted in 1960 and remains in use until this very day.

Table 6: CAP Serialling System, 1939-1960

Serial Range	Purpose of Aircraft
100	Fighter
200	Fighter-bomber or Attack/Strike aircraft
300	Transport aircraft
400	Training aircraft
500	Miscellaneous
600	Helicopters
700	Liaison

Table 7: FAP Serialling System, 1960 – Today

Serial Range	Purpose of Aircraft
0-199	Fighter
200	Fighter-bomber or Attack/Strike aircraft
300	Reconnaissance
400	Transport
500	Training
600	Helicopters
700	Liaison and Communication
900	Civil Aviation School

eight B-26C Invader bombers to complement – and then replace – the FAP's obsolete B-25J fleet. This decision was not well received by the Peruvians, and as a consequence the air force was authorized to look for suppliers in other latitudes in order to cover their needs.

Britain, in need of a market for their own products, took advantage of this situation and began an aggressive marketing program, managing to obtain orders for de Havilland Vampire and English Electric Canberra jets from the air forces of Venezuela, Ecuador and Chile. It was only after the entry of the UK in the Latin American market that the US decided to modify its position and, starting in 1954, to approve the delivery of jet aircraft to the Latin American air forces.

Renovación II

Following the material requirements defined in the plan Renovación II (Renewal II) in late 1953, developed by the High Command of the Peruvian Air Force, on 28 March 1955 the first three – of an eventual total of 16 – Lockheed T-33A training and light attack jets landed at Teniente FAP Humberto Torres Matos AB in Limatambo International airport flown by USAF pilots.¹⁶ The USAF officers gave a quick instruction course on the employment of these aircraft to FAP Captains Valderrama and Thorndike before returning to their



Following the material requirements established in the RENOVACION II (Renewal II) program for modernization of the Peruvian Air Force, the first jets arrived in the country on 28 March 1955 in the form of three, of an eventual total of 16, Lockheed T-33 Shooting Star training and light attack aircraft. (IEHAP)



FAP received its first high performance jet on 1 July 1955 when it took delivery the first six, of a total of 26, North American F-86F-25 fighter bombers. These aircraft, whose procurement has been pursued by the FAP since the year 1953, were acquired through the military assistance program. (Author's collection)

country. With the successful completion of the training program of both officers, the FAP entered the 'jet' era. According to some authors, authorization for the delivery of these aircraft to the FAP met strong opposition from the head of the US Military Mission in Lima, who had previously reported that the FAP was having difficulties operating its aging fleet of Republic F-47Ds, a large batch of which had been acquired by this country just a couple of years before. Likewise, it was the consensual opinion among the different agencies in charge of US defence issues that the need to have these aircraft was based solely on alleviating a nationalist desire to put the Peruvian armed forces at the head of the region.

Only a few weeks later, on 1 July 1955, the Peruvian air force took delivery of the first six of a total of 26 North American F-86F-25 fighter bombers. These aircraft, whose procurement had been pursued by the FAP since 1953, were delivered through the military assistance program.

A few months later, and after a rigorous evaluation carried out by the technical committee of acquisitions of the FAP and in accordance with the guidelines established in the RENOVACION II acquisitions

plan, the Peruvian government took the decision to order a batch of eight English Electric Canberra B(I).Mk 8 bombers. A related contract was signed in September 1955, and things then developed very quickly. In order to accelerate conversion, the FAP HQ had three pilots selected and deployed to Capitán FAP Victor Montes AB in Talara, where they underwent jet-familiarisation training on the recently acquired T-33As of the Escuadrón de Caza 11 (Fighter Squadron 11, EC.11). Additionally, and with the aim of increasing the number of pilots trained on the newly acquired jet trainers, the Peruvian MA coordinated with its British partner in order to provide training in the Canberra to Commanders Pedro Sala Orozco and César Podestá Jiménez, who at the time were on commission on UK soil. The first Canberra arrived on 1 April 1956, crewed by the British Aircraft Corporation's test pilot J. K. Hackett, with P. J. Moneypenny as navigator, while the other seven were all in the country by the end of May of the same year. By then, Lieutenant David Dowling of the RAF was in Peru to help with the conversion training of their crews. These eight Canberras all entered service with the Escuadrón de Bombardeo 22 (EB.22; Bomber Squadron), of the Grupo de Bombardeo 21

(GB.21; Bomber Group 21) and were initially based at the Teniente FAP Humberto Torres Matos AB, outside Limatambo.

Additional Renewal

The acquisition by Ecuador of 12 Gloster FR.Mk 9 Meteor and six Canberra B.Mk 6 bombers, delivered in December 1954 and June 1955, respectively, caused profound concern in the Joint Command of the Peruvian Armed Forces (Comando Conjunto de las Fuerzas Armadas). Delivery of these aircraft represented a disruption in the balance of forces with Ecuador because it made the already obsolete F-47D Thunderbolt interceptors hopelessly useless with a single blow. Therefore, in coordination with the head of the MA, Lieutenant-General FAP Enrique Bernaldes Bedoya, the Chief-of-Staff FAP General Octavio Ríos Higginson and his staff authorised the creation of a technical committee with the mission to develop a study for the selection of the best available jet interceptor. Following exhaustive checks of what was available on the international market, the committee identified the Hawker Hunter as the type meeting all of the FAP's requirements. Therefore, the Peruvian government, then

Table 8: Peruvian Canberra B.(I).Mk 8s			
Aircraft	Pre-1960 FAP Serial	Post-1960 FAP serial	Notes
Canberra B.(I).Mk 8	474	206	ex-RAF
Canberra B.(I).Mk 8	475	207	ex-RAF
Canberra B.(I).Mk 8	476		ex-RAF; crashed 23 Sep 1956
Canberra B.(I).Mk 8	478	209	ex-RAF; damaged 23 Sep 1956; repaired
Canberra B.(I).Mk 8	479		newly-built; crashed 23 Aug 1956
Canberra B.(I).Mk 8	480	210	newly-built; crashed 11 Jun 1959
Canberra B.(I).Mk 8	481	211	newly-built
Canberra B.(I).Mk 8	482	212	newly-built
Canberra B.(I).Mk 8		208	newly-built; replacement for 476
Canberra T.Mk 4		231	ex-RAF T.Mk 4; upgraded to T.Mk 74
Canberra T.Mk 4		232	ex-RAF T.Mk 4; upgraded to T.Mk 74; crashed 6 Oct 1970
Canberra B.Mk 72		233	ex-RAF B.Mk 2
Canberra B.Mk 72		234	ex-RAF B.Mk 2; crashed 17 Dec 1969
Canberra B.Mk 72		235	ex-RAF B.Mk 2; crashed 8 Aug 1968
Canberra B.Mk 72		236	ex-RAF B.Mk 2
Canberra B.Mk 72		237	ex-RAF B.Mk 2
Canberra B.Mk 72		238	ex-RAF B.Mk 2; crashed 3 Feb 1981
Canberra B.(I).Mk 56		239	ex-RAF B.Mk 2; crashed 12 Nov 1973
Canberra B.(I).Mk 56		240	ex-RAF B.Mk 2
Canberra B.(I).Mk 56		241	ex-RAF B.Mk 2
Canberra B.(I).Mk 56		242	ex-RAF B.Mk 6; crashed 13 Dec 1972
Canberra B.(I).Mk 56		243	ex-RAF B.Mk 6
Canberra B.(I).Mk 56		244	ex-RAF B.Mk 6
Canberra T.Mk 74		246	ex-RAF T.Mk 4
Canberra B.(I).Mk 68		247	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		248	ex-RAF B.(I).Mk 8; crashed 30 Jun 1972
Canberra B.(I).Mk 68		249	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		250	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		251	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		252	ex-RAF B.(I).Mk 8; crashed 24 Aug 1980
Canberra B.(I).Mk 68		253	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		254	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		255	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		256	ex-RAF B.(I).Mk 8
Canberra B.(I).Mk 68		257	ex-RAF B.(I).Mk 8; crashed 5 Feb 1995

presided by General Manuel A. Odría, opened negotiations with the government in London, aimed to purchase the type.

In Great Britain, the Royal Air Force (RAF) was in the process of replacing its older Hunter F.Mk 4s with more powerful F.Mk 6s. Thus, plenty of aircraft were available 'off-the-shelf'. Unsurprisingly, an arrangement was quickly reached, resulting in Lima signing a contract to buy 16 Hunter F.Mk 4 with pre-Modell 228 wings, designated the Hunter F.Mk 52, in April 1956. No less than 13 of these were brand-new – never flown in service before – although actually taken from the RAF stock. The necessary funds were granted promptly and enabled the purchase of spare engines and other parts, weapons, support equipment, and conversion training for the first group of FAP pilots.

Delivery by ship took place in May 1956 and enabled the FAP to establish the Escuadrón de Caza 14 within Grupo Aéreo 21 (GA.12). As a follow-up, in 1959 Peru then ordered a two-seat Hunter T.Mk 7 conversion trainer, equipped with a Bendix ARN-6 radio compass, which was delivered a year later.¹⁷

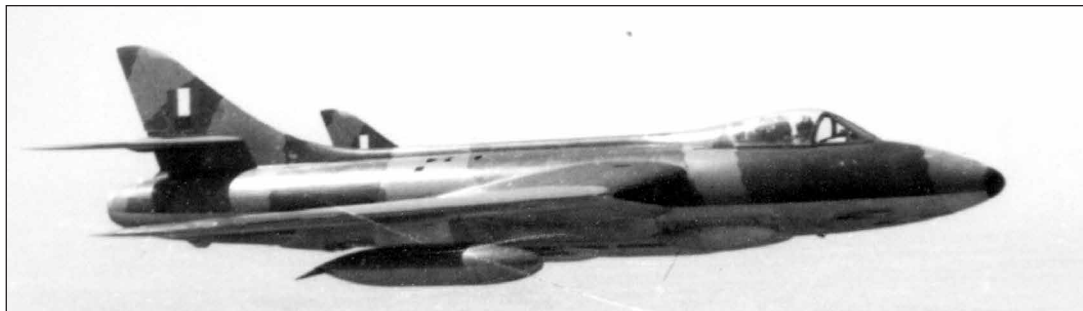
Meanwhile, on 3 February 1958, the FAP took delivery of first three of an eventual total of 16 Lockheed F-80C-1-LO Shooting Stars, acquired as replacements for the long obsolete Curtiss H75A-8s. Two additional aircraft arrived on 21 and 22 April respectively, and deliveries had been completed three days later. The Shooting Stars were officially placed under the command of Escuadrón de Caza Bombardeo 13 (13 Fighter Bomber Squadron) in a ceremony held at Captain Guillermo Concha Iberico AB in the city of Piura on 23 September 1958.

Highly satisfied with the Canberra, but disappointed with the loss of two examples quite soon after their delivery, in 1959 the FAP placed the order for another newly-built B.(I).Mk 8. While this was delivered a year later, it proved insufficient because the attrition of the FAP's bomber-fleet was high and in 1965 the FAP decided to establish a second squadron for the GB.21. Thus, another order for six refurbished Canberra B.Mk 2s, and two T.Mk 4 conversion trainers was placed. The latter two were delivered by the summer of 1966, while the six B.Mk 2s followed between August 1966 and January 1967.

Moreover, in 1968, Peru placed a third order – for a total of six B.(I).Mk 567 bombers – then, in 1969, for eleven B.(I).Mk 68, and in 1971 the final order for one Canberra T.Mk 74 conversion trainer. Finally, all of the B.Mk 2s were upgraded to the B.Mk 72 standard, while in February 1973 all examples were outfitted to be able to deploy French-made Nord AS.30 guided air-to-surface missiles, twin 7.62mm gun pods, or 540lb (245kg) or 1,000lb (455kg) bombs from underwing pylons.

Martillo I: First Mirage Order

Unusually, nearly ten years passed before the FAP launched its next major acquisition project. After a request for a batch of



The Peruvian government ordered a total of 16 Hawker Hunter F.Mk.52s in early April 1956 which, contrary to previous information, were new, even if diverted from surplus RAF stocks.

Delivery of these aircraft, as well as engines, spare parts, weapons, support equipment and training included in the order was completed in mid-May 1956. (IEHAP)



Eighteen Lockheed F-80C-1-LO fighter-bombers were delivered to the FAP starting from 3 February 1958 to replace the Curtiss H75A-8s recently withdrawn from service. Shooting Stars were officially assigned under the command of 13 Escuadrón de Caza Bombardeo (13 Fighter Bomber Squadron) in a ceremony held at Captain Guillermo Concha Iberico AB in Piura on 23 September 1958. (Author's collection)



In September 1955, the Peruvian Air Force ordered a batch of eight Canberra B(I).Mk.8 bombers from the English Electric Co. as part of the RENOVACION II re-equipment program. These were the first of over 40 airframes eventually delivered to the FAP and which served for nearly fifty years. (BAe Systems via Santiago Rivas)



A Canberra B.Mk.68 during acceptance flights in the UK in the early 1970s. FAP Canberra bombers were the first to introduce the two-tone desert sand/dark earth scheme into FAP service. (IEHAP)

team led by General Gilardi to France, with the intention of evaluating Dassault Mirage IIIC interceptors. Moreover, on 2 and 3 March 1967 an acquisition commission led by Major-General Schroth – accompanied by three pilots – visited Dijon and Cazaux air bases in France, to test-fly both the Mirage IIIC single-seaters and Mirage IIIB two-seat conversion trainers. Following a positive evaluation, the Peruvian Ministry of Aeronautics requested an 'immediate transfer' of between three and six Mirage IIIC interceptors from Paris. However, the French government declined because these were meanwhile out of production, and the French Air Force needed all the examples it had. Frustrated but not undeterred, the FAP then decided to take a closer look at the newest Mirage M5J, a brand-new fighter-bomber variant developed for Israel. Compared to the Mirage IIIC, this had a much more simplified avionics outfit, but was equipped for operations in similar meteorological conditions to those expected in northern Peru. Although lacking the Cyrano Ibis airborne interception radar and guided air-to-air missiles, it thus fulfilled the FAP requirement. Unsurprisingly, following additional testing and negotiations, an agreement was reached in favour of this version – and that despite the belated change-of-mind in Washington, where the US government belatedly offered the Northrop F-5A to Lima.

On 20 July 1967, representatives of the Peruvian government, and those of Avions Marcel Dassault, signed the contract for Project Martillo I (Hammer I), stipulating the delivery of the 12 Mirage 5Ps (with P standing for Peru), conversion training of 6 pilots and 30 ground personnel. The urgency was meanwhile such

Northrop F-5A/B Freedom Fighters had been turned down by the US government, on 26 February 1967 Lima dispatched an air force

that the Peruvians agreed to take what were actually aircraft originally manufactured for Israel but embargoed by French president Charles



On 20 July 1967, the Peruvian government and Avions Marcel Dassault representatives signed the MARTILLO I contract which covered the purchase of 12 Mirage 5 fighter-bombers. Mirage M5P serial FAP 185, one of the first aircraft rolling off from the production line, was displayed at Le Bourget Air and Space show prior to its delivery in the summer of 1969. (Photo by Michel Liebert)



A Mirage 5P3 from EA 611 lands at Teniente Coronel FAP Pedro Ruiz Gallo AB after completing a gunnery training mission. Note the aircraft is fitted with a pair of MATRA JL-100 rocket pod/fuel tank combinations. (Photo by Roberto Ruiz)

Mont-de-Marsan, the Peruvians received tactical training, including dissimilar air combat manoeuvring against North American F-100 Super Sabre fighter-bombers, air-to-ground gunnery, and deployment of bombs and rockets.

The first two Mirages for the FAP – two single-seaters that received the FAP serials 182 and 183 – were delivered to Peru on board a Transall C.160 transport of the French air force on 15 June 1968. By this time, the first

de Gaulle because of the Israeli aggression against its Arab neighbours during the June 1967 Arab-Israeli War. Certainly enough, the FAP standards were slightly different to those of the French and the Israeli air forces, and thus before their delivery the aircraft were outfitted with the following navigation-attack (nav/attack) and communication systems:

- Marconi AD370 B radio compass (in place of the original manufactured by Thompson-CSF);
- a VOR-ILS marker Marconi 6401 (in lieu of the one manufactured by SOCRAT)
- a SFIM 154-5 inertial-navigation system (INS; instead of the one made by Sperry)
- a Thompson-CSF CC 262 and a SARAM TRAP 28 VHF radios (replacing the TRT UHF systems);
- a Nord 6071B Telecommand system and the compatibility with the Nord AS.30 guided missile (installed on the centreline hardpoint);
- a provision for the installation of jet-assisted take-off rockets (JATO) on hardpoints below the rear fuselage.

The first six Peruvian fighter-pilots selected to fly Mirages all came from the recently-established Fighter Squadron 611 (Escuadrón Aéreo 611, EA.611). They underwent ground and simulator training at Dijon-Longvic AB, before moving to Mont-de-Marsan AB for flight-training on Mirage IIICs of the French Air Force – because the aircraft made for Peru were still under construction. Moreover, at

six pilots were already back in the country (two of them qualified as instructor pilots), and assigned to the Mixed Air Group No. 6 (Grupo Aéreo Mixto No. 6), home-based at Teniente Coronel FAP Pedro Ruiz Gallo AB, outside Chiclayo. They thus became the first *Mirachistas* – as the Mirage-pilots soon became known within the FAP – and formed the cadre of the newly-established Escuadrón Aéreo 611.¹⁸

The assembly of the first two Mirages was completed on 16 July and following necessary testing, Major Romero-Lovo made the first flight with a Mirage 5P in Peru on the same day. On 19 July 1968 Majors Augusto Romero Ferreccio and Cesar Gonzalo Luzza flew the first two Mirages from Chiclayo to the home-base of the Air Group No. 8 (Grupo Aéreo No. 8, GA.8) at Jorge Chávez International Airport – breaking the sound barrier and reaching the speed of Mach 1.8 in the process. Four days later, the same two pilots and aircraft took part in the official display and presentation of the Mirage weapon system during the ceremony commemorating the Day of the FAP at Las Palmas International.

The remaining 14 aircraft from this first order were delivered in pairs, usually every two or three months, until December 1969. By then, the EA.611 had a flight simulator in operation, and all other facilities required to train pilots and maintain the type 'at home'.

1968 Coup d'État

At the peak of a major scandal and political crisis in Lima, shortly after midnight of 3 October 1968, a group of officers of the Peruvian Army, led by General Juan Velasco Alvarado and supported by elements of the air force and the navy, deployed a squadron of tanks to surround the

Peruvian Naval Aviation

As described in Volume 1, the Supreme Decree issued by the Peruvian Government on 3 July 1932, completed the unification process – launched back in 1929 – of the former CAP, with the other two flying services existing at earlier times: the Naval Aviation Corps, and the Army Aviation Corps. Almost ironically, three decades later, and in response to the request by the Peruvian Navy (Marina de Guerra del Peru, MGP), a new Naval Aviation Service (Servicio Aeronaval de la Marina de Guerra del Peru) was established by the Supreme Decree No. 18, dated with 24 July 1963. The official purpose of this service – renamed into the Naval Aviation (Aviacion Naval, or AviNav), on 11 March 1977 – was to improve the transport and logistic capabilities of the Navy.

Initially, the Naval Aviation Service was equipped with eight Bell 47G2A and Bell 47J helicopters, a single Piper PA-23-25 Aztec, and a North American T-28 Trojan, all of which were primarily deployed for training of future pilots and ground personnel. On 27 November 1966, the service then acquired a single Curtiss C-46 Commando transport (serialised as 502), followed by four Douglas DC-3/C-47, purchased between 1967 and 1971. Furthermore, during the early 1970s, the Navy acquired three Aerospatiale SE.316 Alouette IIIs, a Bell UH-1H, and seven Bell 206 Jet Rangers. Finally, starting from 24 April 1973, the Naval Aviation Service acquired its first combat aircraft – in the form of nine Grumman S-2E Trackers. Purchased through the Military Assistance Programme (MAP), all came from the reserve stocks of the US Navy and entered service with the Naval Aviation Squadron 12 (Escuadrón Aeronaval No.12).



The Peruvian Navy took delivery of nine Grumman S-2E Trackers during the 1970s, with these being assigned to Anti-Submarine-Warfare (ASW) and maritime patrol duties with the Escuadrón Aeronaval N°12 (N°12 Naval Aviation Squadron). Six of these aircraft were deployed to Capitán FAP Víctor Montes AB during the conflict. (Dirección de Intereses Marítimos Marina de Guerra del Perú)

Presidential Palace. President Fernando Belaunde Terry was arrested at gun point, dragged to Jorge Chavez International, and deported on board a privately-owned jet to Argentina. A military junta led by Velasco took over and initiated a 'revolutionary process' foremost targeting the possessions of US companies around the country. Over the following two years, the new government expropriated a number of major oil exploration and metallurgical facilities, electric power plants, and sugar production companies. Although gradually settling down, the related affairs resulted in a major cooling of relations between Lima and Washington, resulting in the USA imposing numerous economic sanctions and an arms embargo. Overdependent on raw material exports, the Peruvian economy was badly hit and by the summer of

1972 Velasco was forced to tune-down his (pseudo-)socialist rhetoric. Washington reacted promptly by dispatching a delegation from the State Department to Lima – the so-called Greene Mission – with the task of seeking a way out of the crisis and negotiating the terms of compensation for the disowned US companies. The dispute was solved to mutual satisfaction: on 19 February, the Peruvian and the US representatives signed the De la Flor-Greene Agreement: while promising to pay US\$140 million in compensation, the Peruvian government achieved an end to economic sanctions – and that of the arms embargo.¹⁹ The latter was of particular interest for the FAP that was meanwhile in the middle of its next re-equipment process. Indeed, the Peruvian air force was immediately granted permission to



The first Mi-8T arrived in Peru in June 1970 as part of the humanitarian aid package sent by the USSR to this country after the massive earthquake that struck the central Andes, causing tens of thousands of victims. It is speculated that these aircraft were not destined to remain in the country but – after a meeting between the Soviet Ambassador and President Velasco during which the Peruvian leader expressed his “deepest gratitude for the donation of helicopters” – the USSR decided to leave the aircraft as a good will gesture. This, along with the good reputation of these aircraft in the country, paved the way for the eventual purchase of nearly 100 Mi-8Ts and its derivative, the Mi-17, during the next years.



As part of the modernization process for its tactical transport fleet the Peruvian Air Force took delivery, between 10 June 1971 and 22 August 1972, of a total of 16 de Havilland-Canada DHC-5D Buffalo which were assigned under the command of EA 842. The aircraft, ranging from construction numbers 44 to 59, were assigned with the FAP serials 321 to 329 and 346 to 352. (IEHAP)



The Peruvian Air Force received at least 36 Cessna A-37B attack aircraft, with the first 12 airframes delivered in 1975. FAP 119 is seen during a test-flight in Wichita prior to its delivery to Perú. (Dan Hagedorn Collection)

purchase 12 Cessna A-37B Dragonfly light attack aircraft to replace its obsolete B-26s and T-33s.²⁰

Much more was to follow, then in the aftermath of the De la Flor-Greene Agreement, the government launched a major modernisation project for the entire Peruvian armed forces. Between November 1970 and October 1972, the FAP thus acquired the following aircraft:

- five Lockheed L100-20 Hercules (from the USA)
- 16 de Havilland-Canada DHC-5 Buffalo transports (from Canada)

- eight de Havilland-Canada DHC-6-300 Twin Otter transports (from Canada)
- 13 Bell 212 and three Bell G-47C-5A helicopters (from the USA)

Combined with the purchase of additional fighter-bombers from France, the result was that by 1972 the FAP was one of best-equipped air forces in South America. It operated 18 Mirage 5Ps (all assigned to the EA.611), 16 F-86F-25 Sabre (EA.111), and 14 Hunter F.Mk 52s (operated by the 114 Fighter-Interceptor Squadron, Escuadrón de Caza-Interceptor 114).

Follow-Ups

Through the early 1970s, the general condition of the FAP Mirage-fleet was further improved. As additional pilots were trained, EA.611 went over to start training the deployment of AS.30 guided missiles. The first of these was launched from a Mirage on 12 May 1971 by Gonzalo Luzza against a simulated target at the Reque gunnery range. Another major step forward was made in terms of maintenance, both on the flight line and through the establishment of the Escuadrón de Mantenimiento 606 and the Escuadrón de Electrónica 605. Moreover, the Air Force's Maintenance Service (Servicio de Mantenimiento de la Fuerza Aérea, SEMAN) was certified to run overhauls of Mirages – and their SNECMA Atar 09C engines – in Peru.

Sadly, EA.611 also suffered two operational losses during this period: one on 8 March 1971 when Mirage 5P serial number 188 was written off, and

sometime in early April of the same year when Mirage 5P 197 was lost in an accident. This prompted the FAP to place an order for additional aircraft. Therefore, in 1974, Peruvian representatives signed a contract for eight single-seat Mirage 5P2s and one two-seat Mirage 5DP2. The first of these reached Peru in the same year (the last arrived in 1976) and were used to establish EA.612, which was also based at Teniente Coronel FAP Pedro Ruiz Gallo AB, outside Chiclayo.

Moreover, in 1976, Peru placed a third order, this time for seven Mirage 5P3s and one Mirage 5DP2: one of the 5P3s was equipped with a Cyrano IV airborne intercept radar and a new Litton LN-33 INS.



Eight DHC-6-300 Twin Otters were purchased from de Havilland-Canada in the late 1960s and assigned to service with the 42 Escuadrón de Transporte in Iquitos. The FAP Twin Otters served with floats and conventional landing gear from Moronacocha seaplane station and Teniente Gustavo Cornejo AB, both located in Iquitos. (Photo by Stephen Aubury)



Eleven Bell 206 Jet Rangers were delivered to the Peruvian Air Force starting from 1974. These nimble aircraft were assigned to liaison and light transport duties in support of oil extraction companies in the Peruvian Amazon forest. (Photo by Stephen Aubury)

These 'best years' were disrupted only by a rather confusing incident that took place on 18 January 1973. While underway on a routine nocturnal navigation training flight, a pair of T-33As from the

stretched fuselage with much better internal fuel capacity, and slat-equipped wings providing a bigger lift area and much improved manoeuvrability. Not only because of its performance, but also because

Fighter-Bomber Squadron 712 (Escuadrón de Caza Bombardeo 712, ECB.712) disappeared at around 02:00hrs. The wreckage of both aircraft – and bodies of their unfortunate crews, including Lieutenant José Luis Rosas Bisetti and 2nd Lieutenant Raúl Leguía – was discovered the next day in a remote field near the Ecuadorean town of Macará. Unofficial Ecuadorean sources claimed that both were shot down by anti-aircraft artillery, but the official explanation from Quito was that the two aircraft collided, and that their wreckage – and the bodies of the two pilots – was found 'enmeshed as one'.

The F-5E Tiger II Affair

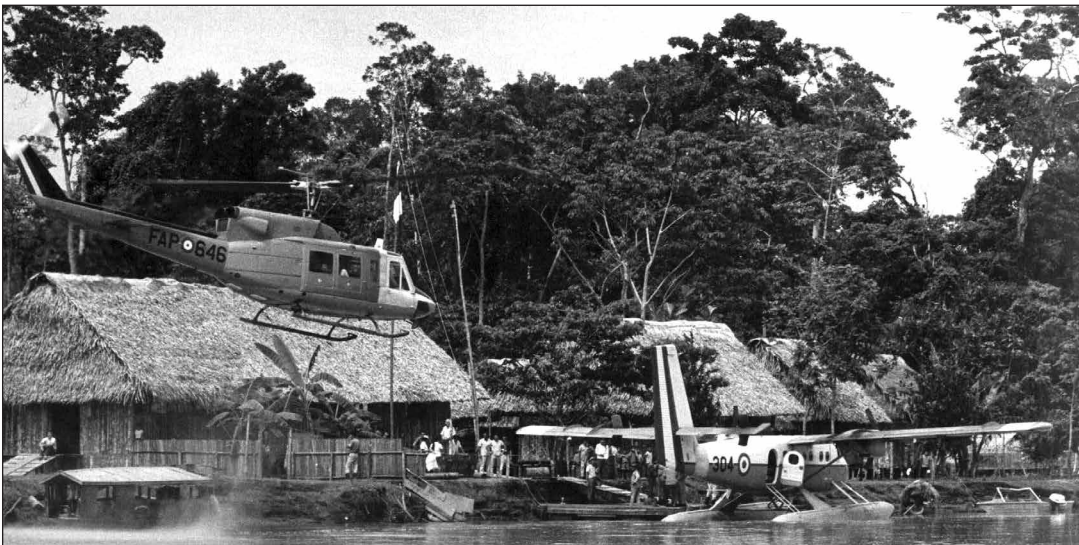
If it had been up to the wishes of the FAP, the Peruvian air force would meanwhile have launched its next major acquisition program. In 1972, the privately-funded new variant of the Northrop Corporation's F-5 – the F-5E Tiger II – was flown for the first time. Nick-named the Tiger II, this included the Emerson Electric AN/APQ-153 radar and – on customer request – an INS nav/attack system, two more-powerful engines, a



The Peruvian Air Force's rearming continued at a steady pace during the 1970s. Six Mi-8T "Hip-E" helicopters were delivered in 1977. These aircraft were assigned under the command of the Escuadrón de Helicópteros 341 of Grupo Aéreo N°3. (IEHAP)



Six massive Mi-6 "Hook" transport helicopters were delivered in late 1977 and placed under the command of Escuadrón de Helicópteros 341. The image shows one of these large aircraft being uncrated after delivery at the premises of GA N°3.



Moronacocha, early 1970s. Aircraft from GA N°3 and GA N°42 are seen during operations from this important link centre located in the outskirts of the city of Iquitos in the Peruvian eastern territories. (IEHAP)



The unique heavy-lifting capabilities of the "Hook" are clearly demonstrated in this picture. An Mi-6 carried the whole fuselage section of a DHC-5 Buffalo from GA N°8 in Callao to Las Palmas AB for repairs in the mid-1980s. (IEHAP)

of aggressive advertising by Northrop's chairman Thomas V Jones, it promptly attracted lots of attention all over the world. The FAP was one of the first potential customers to express interest, but the F-5E was not the only candidate: other interesting types included the McDonnell-Douglas A-4 Skyhawk and the British Aerospace Harrier. Therefore, in early 1973 a Technical Evaluation Committee (Comité Técnico de Evaluaciones, CTE) of the Ministry of Aeronautics travelled abroad to explore all three types as possible replacements for F-86Fs and Hunters. Moreover, Northrop and British Aerospace were invited to demonstrate their aircraft to the CTE at the Las Palmas AB in 1973 and 1974. The evaluation ruled the F-5E as the winner, with an almost perfect score in regards of flight performance, the unit price, and operational costs. Unsurprisingly, the FAP requested the government in Lima to open negotiations with Washington for an acquisition of 24 aircraft.

This time, it was the after-effects of Washington's mishandling of the De la Flor-Greene Agreement that came in between them. While the US government signalled its preparedness to sell a batch of 18 F-5Es to the FAP (with

an option for additional aircraft), on 10 March 1974 the Peruvian military attaché in Washington was suddenly advised to officially decline the acquisition for reasons of, 'high unit cost and the lack of favourable financing'. Oddly enough, at the same time the attaché was informed that the procurement of additional A-37Bs would continue as planned. Simultaneously, rumours began circulating in Lima that the government had received an offer from the USSR to re-equip the Peruvian armed forces at a very favourable price, financed by a credit payable over ten years at an interest rate of only 3%.

In mid-1973, the US government made it public that as a part of the De la Flor-Greene Agreement, Peru had agreed to pay compensation for nationalised US property. Of course, this sent shockwaves through Lima. With the country's economy still suffering from US sanctions, Velasco found himself unable to ignore such an indiscretion. Therefore, he authorised his Prime Minister, General Edgardo Mecado Jarrin, to negotiate the acquisition of 250 T-55 main battle tanks (MBTs) from the USSR. Once in the USSR, Jarrin was invited to visit a joint exercise of the air force, army, and navy run on the coast of the Black Sea, and then presented with the Soviet offer for arms and equipment at very low prices, low interest rates, and very rapid delivery schedules. Last,

but not least, the Soviets offered the option of Peru paying through such commodities as fish, flour, and minerals. Never forgetting that the USA had repeatedly blocked sales of military material to Peru over the last three decades, Jarrin and Velasco decided to take this offer: ultimately, the Peruvian decision not to buy F-5Es was thus a direct result of the US policies vis-à-vis Peru.

Tacnazo

Before long, the De la Flor-Greene Agreement bagged its next victim. On 29 August 1975, General Francisco Morales Bermúdez, Head of the Council of Ministers, staged a military coup against the administration of General Juan Velasco Alvarado. Initiated as a 'military uprising' in the southern city of Tacna – which is why it became known as *Tacnazo* in Peru – the coup was almost unanimously supported by the most prominent members of the Peruvian armed forces. Already confronted by his declining health, and realising his progressive loss of authority, Velasco resigned, and Morales Bermúdez took over.

Although the latter then began the period known as the 'Second Phase of the Peruvian Armed Forces Revolutionary Government'

(which lasted from 1968 until 1980), next to nothing changed in regards of the acquisition process of arms and equipment. On the contrary: eager to please generals that supported his coup, Morales Bermúdez continued with commitments made by Velasco, and quickly signed numerous additional contracts – both with the USA and the USSR.

Arms Have No Ideology

Meanwhile, in the USSR in January 1975, a new variant of the prolific Sukhoi family of fighter bombers – the Su-17M2D – made its first flight. Virtually identical to the earlier Su-17M2 in terms of avionics and armament, this was powered by the Tumansky R-29BS-300 engine (with a marginal increase in power over the original Lyulka AL-21F3), modified electrical, hydraulic, and fuel lines, an extended dorsal fin and a taller vertical stabilator. The subsequent testing had shown that the new variant required a slightly shorter take-off run, while reaching slightly higher top speeds and carrying a slightly heavier payload, albeit at the cost of a higher fuel consumption. The Soviet air force had no use for such an aircraft, though, and it was thus offered for the export

Peruvian Army Aviation

Originally established on 28 January 1919 the Military Aviation Service (Servicio de Aviación Militar) of the Peruvian Army was gradually converted into the above-mentioned CAP, and then the FAP over the following decades.²¹ The Army still considered it necessary to operate its own aviation, nevertheless, and thus in the 1960s – and in cooperation with a non-profit, religious organisation aiming to evangelise the Amazon basin – created the Army Liaison Group (Grupo de Enlace del Ejército). A few years later, additional studies by the Army led to the conclusion that it was in need of its own aviation, foremost equipped with helicopters. As a result, the Supreme Decree No. DS 009-73/GU from 27 March 1973, officially created the Army Light Aviation Group (Grupo de Aviación Ligera del Ejército, GALE), and then placed orders for French-made SE.316 Alouette IIs and Soviet-made Mi-8T helicopters. The first generation of the Peruvian Army aviators graduated in October 1974, while three years later, on 10 June 1977, the service was re-designated as the Army Aviation (Aviación del Ejército, shortened to EP – for Ejército del Perú, for easier understanding, in this volume).



The Servicio de Aviación del Ejército del Perú was re-formed in 27 March 1973, with the entrance in operations of Grupo de Aviación Ligero equipped with five Helio Super Courier liaison aircraft, transferred by the FAP. Flying operations with helicopters started in 1974, when eight Aérospatiale SA.318C Alouette II were purchased, followed by large quantities of Mi-8T "Hip-E" helicopters from 1977. (Photo by Bill Teasdale)



16 Antonov An-26 tactical transports were purchased in 1977 at a total price of US\$64 million. These aircraft were assigned under the command of Escuadrón de Transporte 843 of Grupo Aéreo N°8. (Photo by Stephen Aubury)



A total of 20 S-125 Neva/Pechora (NATO designation "Goa") launchers and their associated air defence radar units were delivered to the FAP in 1977, at a price of US\$40 million. (Author's collection)



DHC-6 aircraft assigned to Escuadrón de Transportes 421 of GA N°42, parked in the Moronacocha lagoon in Iquitos, operations centre for the float-equipped Twin Otters. (Photo by Stephen Aubury)

market, under the designation Su-22 (ASCC/NATO-codename 'Fitter F').²² By August of the same year, Moscow offered this version to Lima and, following short negotiations – rather unsurprising considering

the FAP was very keen to obtain a fighter-bomber capable of carrying up to 3,000kg of weapons at a speed of 1,000km/h – a contract was signed for the purchase of 36 aircraft, including 32 single-seaters and 4 Su-22UM conversion trainers (ASCC/NATO-codename 'Fitter E') – with an option for 18 further airframes.

Other than aircraft and engines, the FAP also acquired a sizeable package of spare parts, and then a complete set of Soviet-made air-to-air and air-to-ground weaponry for its Su-22s, including R-3S air-to-air missiles (ASCC/NATO-codename 'AA-2 Atoll'), S-5 57mm and S-24 240mm rockets; a large consignment of Soviet-made bombs, and UPK-23 pods containing twin-barrel 23mm cannons.

Interestingly, this acquisition was announced in public by Peru's Minister of Foreign Affairs, José De la Puente Rabbill, at a press conference only on 2 November 1976. When questioned if this might generate alarm in neighbouring Ecuador, and if it might mean a 'turn to the left' in Peruvian foreign policy, De la Puente answered:

The Peruvian state has all the rights to periodically renew its military equipment...several countries have been invited to offer their products and financing conditions during our selection process...the USSR was the only

[one] to offer favourable terms...and it responded in a timely manner to the requirements of the Peruvian government... and If you receive favourable terms, you accept them because aircraft have no ideology.²³

Training in the USSR

As could be expected, the MA and the FAP were quick in selecting a team of hand-picked officers, non-commissioned officers (NCOs), and technical personnel of diverse specialities for a conversion course to Su-22s in the USSR. In October 1976, 11 officers, 56 other ranks, and 7 liaison officers, travelled to the Soviet Union: pilots were to undergo a six-month conversion course in Krasnodar, in the Caucasus, at the specially set up FAP Specialization Centre (CEFAP), while the NCOs underwent their own course at the Frunze Air Base (nowadays in Kyrgyzstan). Before undergoing their actual training, everybody received a crash course in Russian: pilots then received ground instructions, flight instruction on the Sukhoi Su-7, and then the Su-20 – both of which were antecedents of the Su-22. It was thus in February 1977 that the Peruvian pilots had their first contact with their new mounts, when a factory-fresh airframe was delivered to a Soviet air force unit co-located at the same base. First impression was the sheer size of the Su-22, and then its significantly different concept in comparison to the Mirage 5P. One of the first pilots officially declared as qualified to fly the new jet was Colonel Luis Abraham Cavallerino, commander of the newly-established GA.11, in spring 1977. That said, the Soviets only provided instruction in basic operations, such as a take-off, landing, and simple navigation within sight of the home base: the Peruvians had to provide tactical training to their own crews.²⁴

As the flight and ground personnel completed their training, preparations began for the delivery. The first of 36 Su-22s arrived in Peru in June 1977, on board a cargo ship that docked in the port of Paita (about 1,000 kilometres/621 miles north of Lima), together with support equipment and some armament. From there, the aircraft and containers containing equipment were moved to the nearby El Pato AB, outside Talara, the home-base of GA.11. There, they were accepted by a team of Sukhoi's technicians and engineers led by



A Bell 212, identified with serial FAP 603, is about to touch ground on a landing pad at a supply post in eastern Peru. The flying experience obtained by the GA N°3 crews over the jungle would prove of valuable help during the development of the conflict. (IEHAP)



In late September 1976 a contract was signed for the purchase of 36 OKB Sukhoi Su-22 bomber bombers: 32 Su-22 "Fitter F" single-seaters and 4 Su-22UM trainers ("Fitter E"). This acquisition marked the first – and only – export success of the Fitter series in the western hemisphere. (Photo by Roberto Medina)

Colonel Fyodor Nikolay and Major H Kozhushko who undertook the assembly tasks and then provided support as the ground personnel of the base worked up. First test flights were completed within only four days of the arrival of the aircraft.

Initial Operational Capability

Peruvian Sukhois were officially presented to the press for the first time on 23 July 1977 – the anniversary of Peruvian military aviation. On that day, two Su-22s flew from Talara to Las Palmas AB, breaking the sound barrier in the process. Following tactical training of the first group of its pilots, GA.11 received the first mission assignment for its Su-22s on 20 September 1977: this consisted of a supersonic attack on a target behind the enemy lines. The secondary task became air defence with the help of R-3S missiles and two 30mm NR-30 internal



A line of Su-22s parked on the tarmac of El Pato AB in Talara in early January 1981. Su-22U serial FAP 025, which crashed in Talara in January 1981, is seen in the foreground. (IEHAP)

cannon.

The first group of Su-22s and pilots qualified to operate them (six 2nd lieutenants, four lieutenants, four captains, and four majors) were organised into EA.111, the first commander of which became Major-General Carlos Boluarte Guevara. The unit was officially declared ready for operations in November 1977. During the following months another 18 Peruvian pilots were qualified to fly the type, with which the FAP reached its original intention of having 36 officers for 36 aircraft. In order to test – but also to demonstrate – EA.111's high level of preparedness, the unit promptly took part in a joint exercise with the Navy and Army, code-named Impala.

Additional Soviet Arms

As well as the Sukhoi, during the same period Peru also acquired additional aircraft, helicopters, and arms from the USSR. In 1977, the FAP received six massive Mil Mi-6 transport helicopters, and the same number of Mil Mi-8T assault helicopters (at a price of US\$15 million and US\$4.2 million apiece, respectively). These were followed by 16 Antonov An-26 tactical transports (acquired for a total of US\$64 million), and enough equipment for five battalions (or five 'sites') of S-125 Pechora (ASCC/NATO-codename 'SA-3 Goa') surface-to-air missiles (the total price for the SA-3s was US\$40 million).²⁵

General Francisco Morales Bermúdez's government also continued spending lavishly on its armed forces during the following year. In September 1978, it signed a contract for the acquisition of spare parts and the provision of instruction in routine maintenance and

for minor repairs of Su-22s on Peruvian soil. However, for the time being, the Soviets proved 'reluctant' to certify the SEMAN for complete overhauls: because of this, these had to be undertaken in the USSR until well into the second half of the 1980s – which, of course, not only caused unnecessary high transport costs, but also meant that up to a third of the fleet was out of service at any given time. Unsurprisingly, the situation soon began presenting a major financial problem – even more so at the time when Peru faced a major economic crisis, generated by the poor financial management of the junta. Still, or nevertheless, in late 1979 Morales Bermúdez's government decided to exercise the option for the purchase of additional Sukhoi, and placed an order for 16 slightly improved Su-22M3s (ASCC/NATO-

Table 9: FAP's Command and Control Nodes in the NOT, January 1981

	Location	Designation	Equipment & Notes
Talara North Control Centre	Talara	TNCC	P-14 & P-15M early warning radars
Early Warning Sub-Centre	Tumbes		P-35 surveillance and P-15M early warning radars
Early Warning Sub-Centre	Chiclayo		P-35 surveillance and P-15M early warning radars
Fire Control Centre	Piura		P-35 surveillance, P-15M early warning and NRS-12 secondary radar with enemy-IFF-interrogator, one SA-3 SAM-site
Forward Radar Station	Avabaca		NRS-12 secondary radar with enemy-IFF-interrogator
Forward Radar Station	Huancabamba		P-35 surveillance and P-15 early warning radars, one SA-3 SAM-site
Forward Radar Station	Sullana		P-35 surveillance and P-15 early warning radars
SA-3 SAM-site	El Alto		P-15 early warning radar and four launchers (12 rails) for V.601 missiles
SA-3 SAM-site	El Pato FOB		P-15 early warning radar and four launchers (12 rails) for V.601 missiles
SA-3 SAM-site	Tablazo		P-15 early warning radar and four launchers (12 rails) for V.601 missiles

Table 10: FAP ORBAT, January 1981						
Unit	Base	Location	Aircraft Type	Available	Operational	Notes
Chief of Staff FAP: Lieutenant-General Luis Arias Graziani ²⁹ Chief of Staff COMOP: Major-General Carlos Boluarte Guevara NOT/TNCC, HQ Talara, CoS Colonel Cesar Gonzalo Luzza						
EA.611 & EA.612 (GA.6)	<i>Teniente Coronel FAP Pedro Ruiz Gallo AB</i>	Chiclayo	Mirage M5P3/ M5DP3 fighter bombers	32	25	
EA.711 & EA.712 (GA.7)	<i>Capitán FAP Guillermo Concha Iberico AB</i>	Piura	Cessna A-37B Dragonfly	27	16	
EA.111 (GA.11)	<i>El Pato AB</i>	Talara	Sukhoi Su-22/22U 'Fitter F' fighter bombers	39	34	
EA.332 & EA.341 (GA.3)	<i>Mayor General FAP Armando Revoredo Iglesias AB</i>	Callao	Mi-6, Mi-8T, Bell 212, Bell 206	6, 8, 19, 11	2, 4, 6, 3	Detachment temporarily at Alto Comainas (supporting COMOP)
EA.921 (GA.9)	<i>Capitán FAP Renán Elías Olivera AB</i>	Pisco	Canberra B(I).Mk 78/B(I).Mk 8/B(I). Mk 62	6, 4, 6	12	
EA.841 (GA.8)	<i>Mayor General FAP Armando Revoredo Iglesias AB</i>	Callao	Lockheed L-100	3	3	
EA.842 (GA.8)	<i>Mayor General FAP Armando Revoredo Iglesias AB</i>	Callao	de Havilland Canada DHC-5 'Buffalo'	16	6	
EA.842 (GA.8)	<i>Mayor General FAP Armando Revoredo Iglesias AB</i>	Callao	Antonov An-26 'Clint'	14	8	
EA.421 (GA.4)	<i>Coronel FAP Francisco Secada Vignetta AB</i>	Iquitos	C-47 Skytrain, DHC-6 and Pilatus PC-6	2, 4, 3	1, 2, 2	Some aircraft equipped with floats and operating from rivers in the Amazon basin. Unit reinforced by a few DHC-5 and An-26s of GA.8.

codename 'Fitter J') and 3 Su-22UM-3s (ASCC/NATO-codename 'Fitter G'). Delivery of these aircraft took place a year later and enabled the FAP to establish its second Sukhoi-equipped unit, EA.411, initially commanded by Major Jorge Bustamante Zavala, and based at La Joya AB, in the department of Arequipa in southern Peru.

Planning and Organising Operation Rechazo

The new Peruvian president – Fernando Belaunde Terry – took over from the military junta after returning from exile in July 1980 – authorised his armed forces to expel the Ecuadorean forces from the country's territory. Planning for this was undertaken under the guise of Operation Rechazo as of 26 January 1981, and the FAP was capable of deploying an imposing number of operational assets within the combat zone thanks to all of the above-mentioned acquisitions of the 1970s (see Table 9)

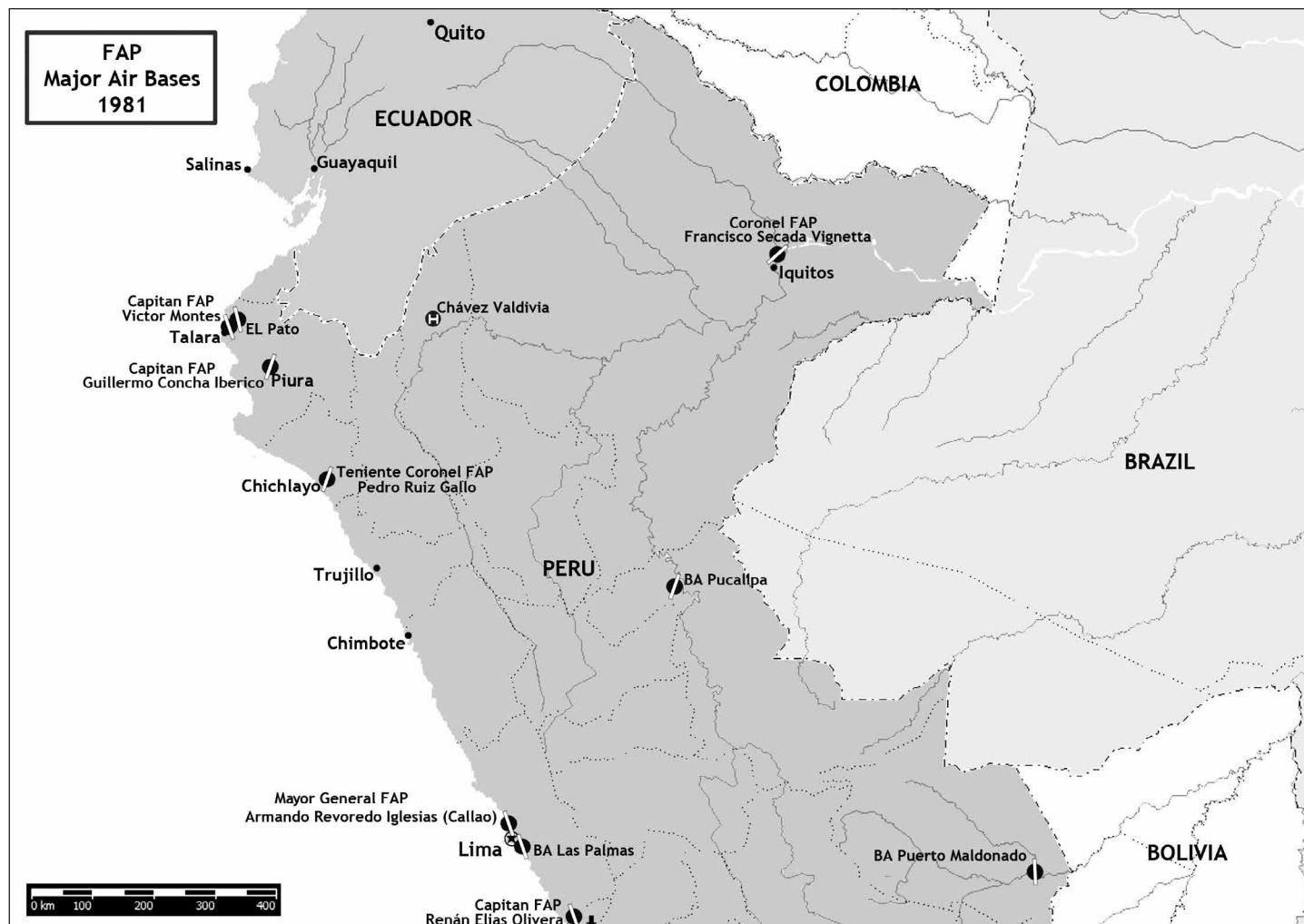
Belaunde was not keen to incite a major, all-out war. Therefore, he explicitly ordered the FAP never to enter the Ecuadorean airspace.

Responsible for exercising the overall control of the FAP's flying units, and all other air defence units was the FAP Operations Command (Comando de Operaciones, COMOP) in Lima. In turn, this acted via the *Mosaico Nacional*: a semi-automatic, integrated air defence system (IADS) providing early warning and tracking, the vectoring interceptors and fighter-bombers, and of fire-control over the entire territory of Peru. The pillars of the Mosaico Nacional were three control centres (CTs), which collected and integrated the

information from all available sensors, transmitted it to air bases, SAM-sites, and forward air defence posts, and provided fire control. The CT responsible for operations in the Northern Operations Theatre (NOT) was the Talara North Control Centre (TNCC), which in turn exercised control over the units listed in Tables 8 and 9.

As is the norm in every professional air force, all of FAP's plans for a war with Ecuador envisaged an aerial offensive against major Ecuadorean air bases with the aim of establishing aerial superiority over the FAE. However, Belaunde's order for Peruvian aircraft not to violate the Ecuadorean airspace not only denied this option to the FAP, but completely compromised all the planning and execution of the upcoming operations. Commanders of the Peruvian air force thus had to improvise and operate flexibly, from day to day.

In the weeks prior to the onset of hostilities, the FAP units based within the NOT underwent comprehensive preparations. At Talara, EA.111 had only completed the conversion of 36 of its pilots to the Su-22M and it was still short of the desired crew-to-aircraft ratio of 1.5-to-1. Therefore, the commander of GA.11, Colonel Cesar Gonzalo Luzza, ordered 12 of his fighter-bombers to be re-deployed to Las Palmas AB, in order to lessen their exposure to possible Ecuadorean air strikes, but also to concentrate available pilots and ground crews to a lower number of operational airframes, and to counter any possible threat from Chile. Commanded by Major Carlos Portillo, this detachment remained at Las Palmas AB until 15 February 1981.²⁶ In turn, the remaining 24 Su-22s were distributed between Talara and



A map of major FAP bases in northern and central Peru as of 1981. (Map by Tom Cooper)

the nearby El Pato FOB.

Further to this, the command of GA.11 controlled the deployment of three SA-3 SAM-sites and three teams equipped with 9K32 Strela-2 (ASCC/NATO-codename 'SA-7 Grail') for protection of the Capitán FAP Victor Montes AB, the nearby El Pato FOB, and the oil refinery of Talara. Each of these three – well-camouflaged – SAM-sites was further reinforced by a battery of FAP-operated ZU-23 automatic anti-aircraft cannons, and a battery of EP-operated ZSU-23-4 self-propelled, radar-supported anti-aircraft guns.

Moreover, while some Su-22s were armed with R-3S missiles and assigned the task of interception, others were equipped with the big Soviet-made KKR-1T reconnaissance pods.²⁷ Finally, Luzzu took care to coordinate 'blackout' measures with civilian authorities in Talara, in order to make the entire area less susceptible to detection from the sky by night.²⁸

Homebased at Teniente Coronel FAP Pedro Ruiz Gallo AB, in Chiclayo, the EA.612 underwent similar preparations. Its ground crews took care to bring all 14 of its Mirage 5Ps to fully mission capable condition. Moreover, because the FAP had no US or French-made guided air-to-air missiles, the armourers of this unit wired all of

Table 11: Code-names for FAP aircraft

Aircraft Type	Codename
Cessna A-37B	Vampiro (Vampire)
Mirage 5P	Dardo (Dart)
Su-22	Flecha (Arrow)
Lear jet	Blanco (White)
Forward Air Control aircraft	Soplón (Snitch)

Table 12: Code-names for FAP's FOBs

Base	Codename
Ciro Alegría	Lisboa
Chávez Valdivia	Pekin
Comainas	Italia

their Mirages for the deployment of two Soviet-made R-3Ss. Further armed with their two DEFA internal 30mm cannon and carrying a pair of 1,700-litre 'ferry' drop tanks, two or three jets from this air base were to fly constant combat air patrols under the control of the TNCC.

The sister-squadron, EA.612, acted in similar fashion. Its ground crews brought all of their 16 Mirage M5P3s to fully mission capable condition. All were configured for ground strike, armed with bombs and drop tanks, and a pair was constantly kept on 'alert plus 5' status, with pilots in their cockpits and waiting for the order to strike pre-selected, high-value targets in Ecuador. Amongst these were such air bases as Mariscal Sucre outside Quito, Latacunga, Taura, Ulpiano



The FAE took delivery of 13 Cessna A-37B Dragonfly COIN fighters in 1975, and these entered service with EC.2112 at Taura AB a year later. In 1979, they were transferred to Elroy Alfaro AB, outside Manta, and subordinated to the newly-established Ala de Combate 23. All initially wore the same 'South-East Asia' camouflage pattern in tan (FS30400), green (FS34102), and dark green (FS34079) on upper surfaces and sides, and light grey (FS36622) on undersurfaces. A large national flag was worn on the rear fuselage with a large service title and serials in black on the fin. Shown is one of two examples involved in air combat with FAP A-37Bs on 28 January 1981; inset is shown the crest of EC.2112. (Artwork by Tom Cooper)



In 1974 the FAE placed an order for 10 Jaguar ES single-seaters and 2 Jaguar BS two-seaters, all powered by Rolls-Royce/Turbomeca Adour Mk.804RT172-26 engines. The aircraft not only replaced the old Gloster Meteors but also the ageing Canberras as the primary strike platform of the FAE. Typical armament consisted of two 1,000lbs (454kg) bombs installed in tandem under the centreline pylon: starting in 1981 the then brand-new Matra R.550 Magic air-to-air missiles were installed on overwing pylons. The camouflage pattern consisted of dark sea grey (BS381C/638) and dark green (BS381C/641) on top surfaces and sides, and either aluminium or light admiralty grey (BS381C/697) on undersurfaces. (Artwork by Tom Cooper)



Ecuador acquired a total of 16 Mirage F.1JA fighter-bombers (and two two-seat conversion trainers) and the unit operating them – EC.2112 – was declared operational on 28 June 1979. Their upper surfaces and sides were painted following a standardised camouflage pattern in two shades of the French semi-matt colour Céloner 4080, similar to grass green (BS381C/218) in the case of the lighter shade, and between French khaki FS36134 and dark green FS34096 for the darker shade. Undersurfaces were painted in camouflage grey (FS36622). Single-seaters received serials in the range 801 to 816, while the two-seaters were serialised as 830 and 831. Insets show the insignia of AC.21 and EC.2112: the latter was often applied on the left intake, behind the landing light. (Artwork by Tom Cooper)



In the mid-1970s, the Ecuadorean air force acquired two Aérospatiale SA.330F Pumas (1226/FAE 226 and 1227/FAE 227). Both were assigned to Ala de Combate 22 and represented the most powerful transport helicopter in operation. FAE 227 was written off on 24 December 1976, however the other example reportedly saw intensive service during the clashes of 1981, but precise details remain elusive. They were delivered in a high visibility paint scheme as depicted in the artwork, with the surviving airframe later being repainted in tropical camouflage like Super Pumas subsequently acquired by the Ecuadorian Army. 'RESCATE' (rescue) was applied to the sliding side doors, but sources differ if at the top or at the bottom. Inset shows the insignia of the Grupo de Rescate 221 which operated the type. (Artwork by Tom Cooper)



Other than the five Aérospatiale SA.342 Gazelles and 11 Aérospatiale SE.316B Alouette IIs, as of 1981 the most important type in service with the Ecuadorean Army was the Aérospatiale SA.315B Lama, six of which were acquired from 1975. This was a helicopter with excellent performance for operations at high altitudes, as in the Cordillera del Cóndor. All wore the same disruptive camouflage pattern in tan (FS34201) and dark green (FS34096). Small service titles and serials (316 in this case) were applied on the rear fuselage. Experiences from 1981 prompted the Ecuadorean Army to subsequently bolster its aviation through the acquisition of eight AS.332 Super Pumas and up to 35 additional Gazelles. (Artwork by Tom Cooper)



In the early 1970s, the FAP acquired 13 Bell 212 helicopters. Operated in small detachments, they became heavily involved in supporting oil exploration operations in the Amazonas. This is why several of them were quickly available as of January 1981. To make them easier to find in the dense jungle, all were painted in bright red, with their cockpit sections in dayglo orange: only the undersides of the cabin were left in light grey. As soon as the fighting began, most were equipped with Mk.3 or Type 252 optical sights, LAU-68 pods for 2.75in unguided rockets and either a pair of pintle-mounted Browning M2 or MAG machine guns. The insert shows the insignia of Grupo Aero 3, the parent unit of the majority of the FAP helicopter fleet of 1981. (Artwork by Tom Cooper)



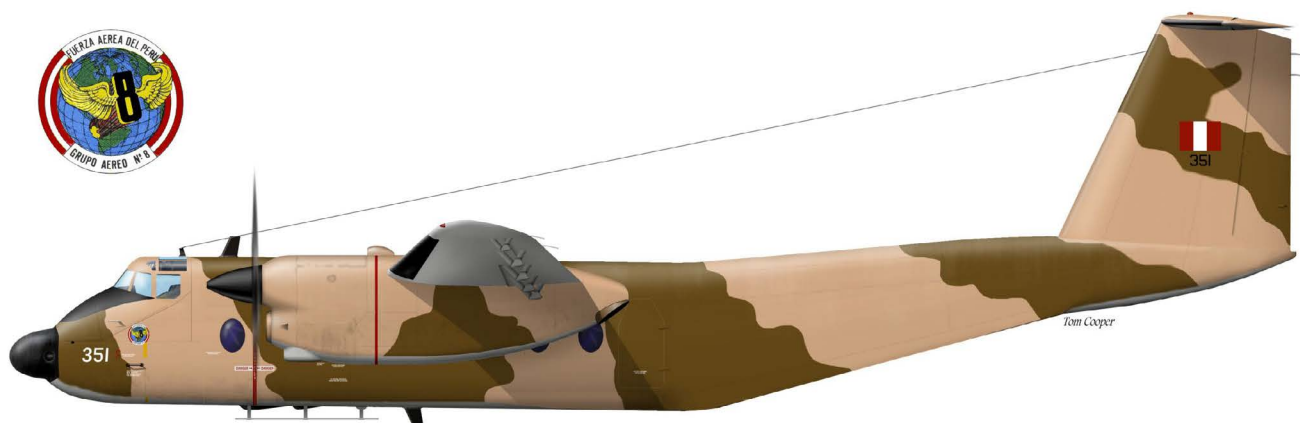
Following the surprising acquisition of a sizable quantity of Su-22 fighter-bombers, the FAP ordered six massive Mil Mi-6 transport helicopters. All were assigned to EA.332 and used for transport and assault from Mayor General FAP Armando Revoredo Iglesias AB in Callao (outside Lima). All received a camouflage pattern in the same colours as used on the Mirage M5Ps, although some photos indicate the use of a dark olive drab instead of brown colour, and most also had their cockpits painted in dayglo orange. The insignia of Grupo 8 or EA.332 was sometimes applied below the cockpit. As far as is known, none was ever armed. (Artwork by Luca Canossa)



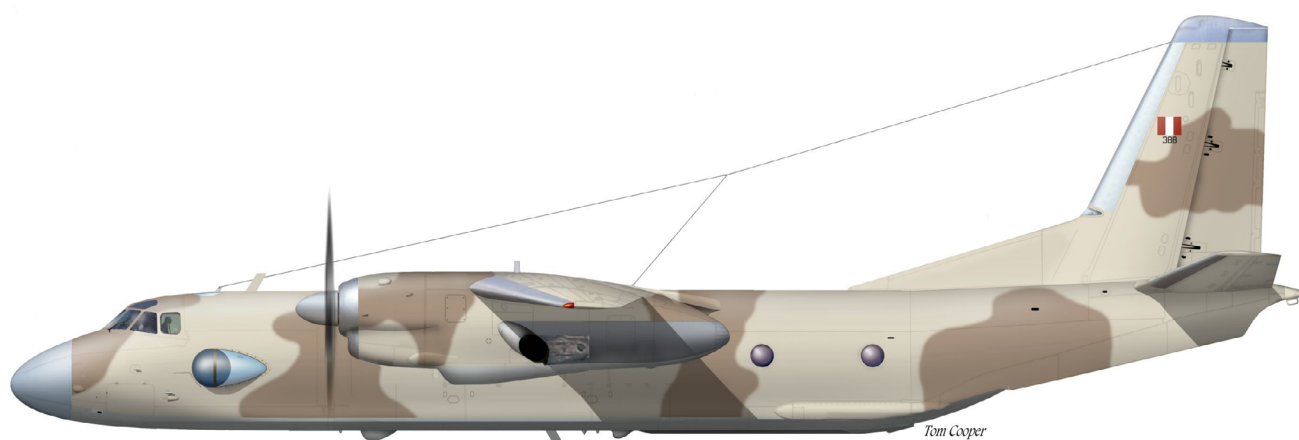
The FAP acquired its first Mi-8T in May 1970 as a donation from the USSR following an earthquake. The type was well-liked by its crews, foremost for its high-altitude performance, and thus additional examples were acquired during the mid-1970s. By 1981, all were operated by EA.332 of GA.3 as assault and transport helicopters. The majority were painted in dark olive drab (BS381C/298), with undersides in light admiralty grey (BS381C/67), but some were painted in bright red overall: either way, most FAP Mi-8Ts in 1981 also had their front fuselage painted in dayglo orange. Large service titles on the sides, and serials on the boom – usually in black, but sometimes in white – were a norm of the day: sometimes, civilian registrations were applied instead. (Artwork by Tom Cooper)



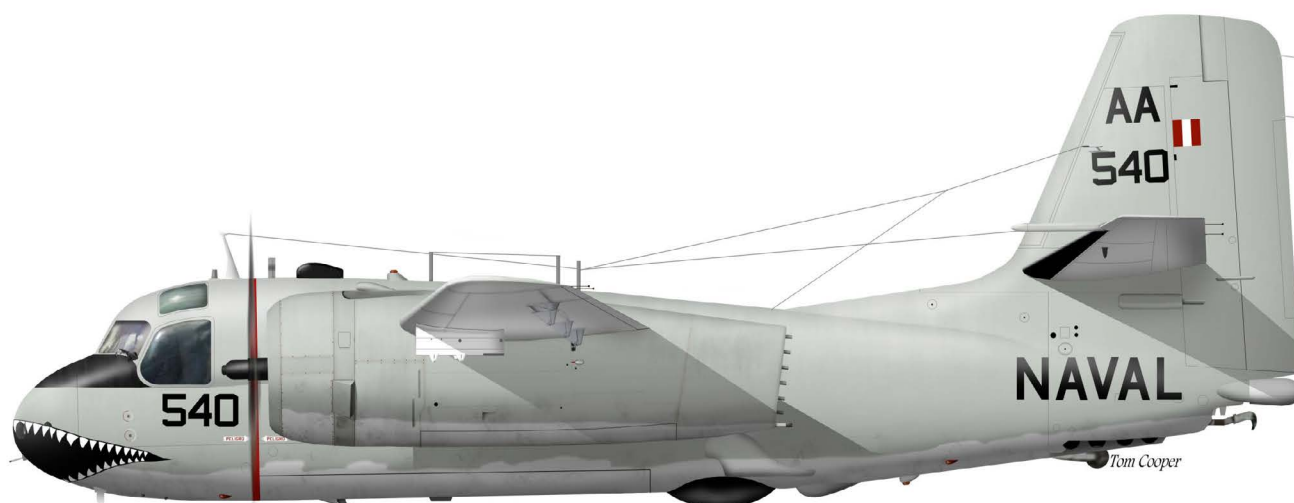
The Servicio de Aviación del Ejército del Peru – the Army Aviation of Peru – acquired a large number of Mi-8Ts starting in 1976. All were operated by Assault and Transport Battalion 811 (Batallón de Asalto y Transporte). Their original camouflage consisted of dark olive drab overall (BS381C/298, which often turned into various shades of grey-brown due to heavy use and exposure to the elements), and dark yellow sand. The service title on the cabin and the large serial on the boom were usually applied in white. Notable is the Army Aviation's roundel, containing a red triangle instead of the usual red 'dot' in the centre. All Mi-8Ts could be armed – usually with UB-16-57 (as shown) or UB-32-57 rocket pods for S-5M 57mm rockets. (Artwork by Tom Cooper)



The FAP acquired a total of 16 de Havilland Canada DHC-5 Buffalo transports during the early 1970s and these were all assigned to ET.842 (GA.8), home-based at Mayor General FAP Armando Revoredo Iglesias. All wore the same, standardised camouflage pattern in middle stone (BS381C/362) and dark brown (BS381C/411) on top surfaces and sides, and light aircraft grey (BS381C/627) on undersurfaces. If applied, the insignia of GA.8 was on the left side below the cockpit (sometimes accompanied by a silhouette of a buffalo in white), and sometimes repeated on the fin. Small black serials were applied below the fin flash. The serial was repeated on the upper surface of the right wing, and the roundels applied on the upper surface of the left and the lower surface of the right wing. (Artwork by Tom Cooper)



From 1977, Perú acquired a total of 16 Antonov An-26 transports which were assigned to Escuadrón de Transporte 843, a unit subordinated to GA.8. While this was primarily a transport unit, it took part in combat operations when one of its aircraft performed a bomb run over one of the observation posts occupied by Ecuadorian forces. At of the time all wore a standardised camouflage pattern consisting of beige (BS381C/388) and either dark earth (BS381C/350) or dark brown (BS381C/450) on upper surfaces and sides. The radomes and the fin tip were painted in a grey shade similar to camouflage grey (BS381C/627), while the undersides were probably painted in light admiralty grey (BS3891C/697). Leading edges of the wing, horizontal stabilisers, the fin, engine nacelles and the spinner were all left in natural metal. The serial, in black, was applied below the fin flash: available photographs do not enable any kind of useful conclusions in regards of possible application of roundels on their wings. (Artwork by Tom Cooper)

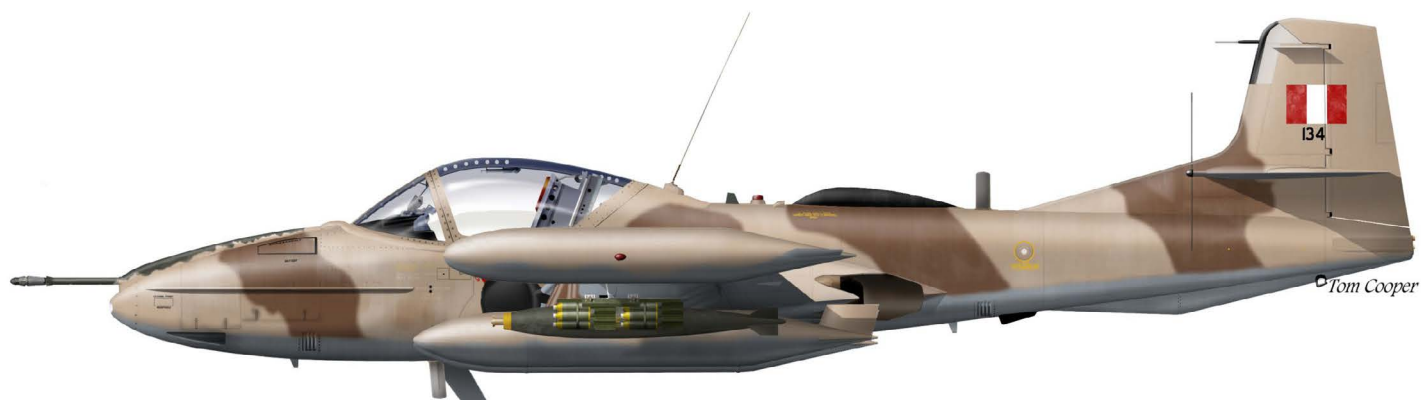


As of 1981, Peruvian Naval Aviation had nine Grumman S-2E Trackers in operation. All were assigned to Escuadrón Aeronaval No.12, and all came from surplus stocks of the US Navy: unsurprisingly, they still wore the standard livery consisting of gull gray (FS16440) on upper surfaces and sides, and white (FS17875) on undersurfaces. Large black serials were worn below the cockpit and on the fin, and the service title on the rear fuselage. At least three or four also wore a large 'sharkmouth', the exact form of which was different from aircraft to aircraft. Notable is the spinner painted in black. (Artwork by Tom Cooper)



From 1973 until 1979, Peru acquired a total of 36 Cessna A-37B Dragonfly light strikers. All were camouflaged in sand (FS30277) and field drab (FS30118) on top surfaces and sides – applied to a standardised camouflage pattern, but with significant differences from aircraft to aircraft – and light gull gray (FS36375) on undersurfaces. The radomes covering the navigational system, and the area around the intake were painted in black. The serial was applied below the flash on the fin and repeated on the upper surface of the right wing, while the roundels were applied on the top surface of the left wing and the bottom surface of the right wing. This example, serial number 118, was flown by Lieutenant Raúl Calle during the air combat with the pair of Ecuadorean A-37Bs on 28 January 1981.

It is shown as armed with a LAU-3A pod for 2.75in unguided rockets. Inset is shown the crest of GA.7. (Artwork by Tom Cooper)



Peruvian A-37Bs flew only 42 hours of combat operations during the Paquisha War, but – except for helicopters – conducted the highest number of combat sorties. Their usual combat configuration during this conflict consisted of a total of four 379-litre drop tanks, a pair of Mk.82 general-purpose bombs, and a pair of M1A1 or CBU-26 cluster bombs (each carrying either six or eight 20-pound M41 fragmentation bombs). LAU-3A pods for 2.75in unguided rockets also saw frequent use. Notable was their 'in-flight refuelling probe', actually used to speed up the process of refuelling on the ground, and prominent IFF and UHF-aerials: these appear to be comparatively large because the A-37B was a relatively small aircraft. (Artwork by Tom Cooper)



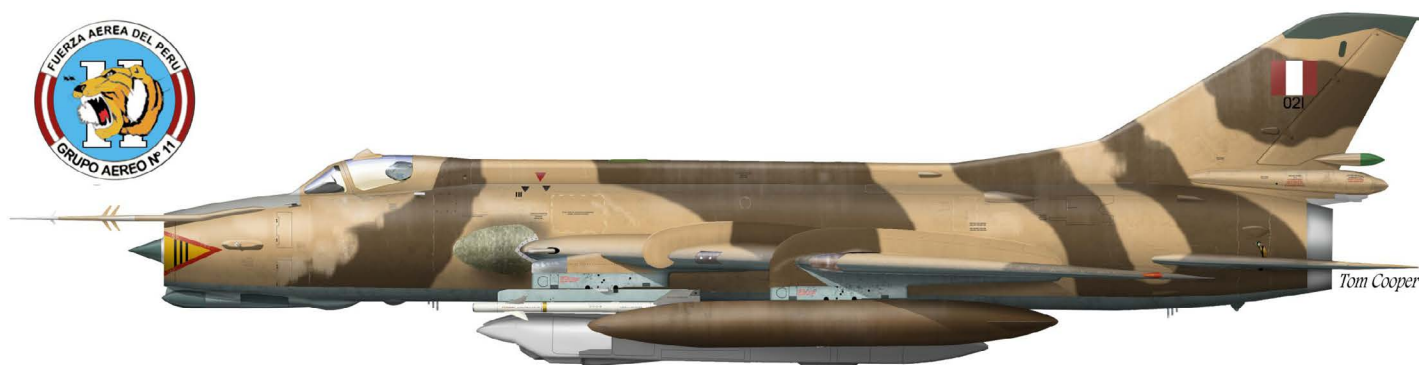
About 25 Canberra B.Mk. 2, T.Mk 4, and B(l).Mk 8 – all upgraded to a B(l).Mk 68-similar standard – were still available to GA.9 as of 1981. Three B(l).Mk 68s from EA.921 were prepared for action at Chiclayo, but they only flew one – daring – reconnaissance sortie over the Galapagos islands. All were painted in light stone (BS381C/361) and dark earth (BS381C/350) applied to a standardised camouflage pattern, and most were decorated with the GA.9 crest, usually applied on the left side of the front fuselage. Notable is not only the underwing pylon (rated for bombs of up to 1,000lbs/454kg), but also the addition of the antenna of the SRO-2 IFF-transponder in front of the cockpit, necessary to make them compatible with the FAP's early warning radars and SA-3 SAMs of Soviet origin: a second set of the same antenna was applied somewhere below the rear fuselage. (Artwork by Tom Cooper)



The FAP's fleet of 32 Mirage M5P3s (and Mirage M5DP3 two-seat conversion trainers) available in 1981 was concentrated within two squadrons of GA.6, both based at Teniente Coronel FAP Pedro Ruiz Gallo, outside Chiclayo. Each of the two units received specialised tasks: the M5P3s of EA.611 – one of which is shown here – were held back in strategic reserve – and prepared for air strikes on Ecuadorean air bases. Correspondingly, most were configured with a pair of RPK-10 drop tanks, each of which also carried four Mk.82 Bombs, as shown here. Their camouflage pattern consisted of sand (FS30277) and field drab (FS30118) applied according to a standardised camouflage pattern on top surfaces and sides: due to weathering, the two colours usually appeared closer to sand (FS33531) and brown (FS30118), as shown here. Undersides were painted in light gull gray (FS36375). (Artwork by Tom Cooper)



Contrary to the 'Dardos' from the EA.611, Mirage M5P3s of EA.612 were dedicated to providing top cover and flying escort sorties. Correspondingly, all were configured as shown here: with a pair of 1700-litre drop tanks (which had to be jettisoned if the aircraft accelerated to supersonic speeds), and a pair of Soviet-made R-35 (AA-2 Atoll) air-to-air missiles. After the Cessnas from EA.712, the Mirages from EA.612 were the FAP aircraft which flew the most combat sorties during the Paquisha conflict. While some of GA.6's Mirages had a large unit crest applied on the fin (shown in inset), this was rather an exception than the rule. More often, they wore their serials applied in black below the fin flash, and on the top surface of the right wing: roundels were applied on the top surface of the left wing and the undersurface of the right wing. (Artwork by Tom Cooper)



Theoretically the most powerful fighter-bombers of the FAP were 36 Su-22s of GA.11: these were held back for most of the Paquisha War, ready to fly air strikes against Ecuadorean air bases if necessary. The entire fleet was camouflaged in Afrika Mustard (FS30266) and field drab (FS30118) applied in very different patterns on top surfaces and sides, and light gull gray (FS36375) on undersurfaces. This example is shown in the configuration used for the reconnaissance of Mariscal Sucre, Manta, Taura and Ulpiano Paez air bases in Ecuador, on 30 January 1981: this included a pair of drop tanks on outboard underwing stations, a pair of R-35 missiles on inboard underwing stations, and the giant KKR-1 reconnaissance pod under the centreline. Inset is shown the crest of GA.11. (Artwork by Tom Cooper)



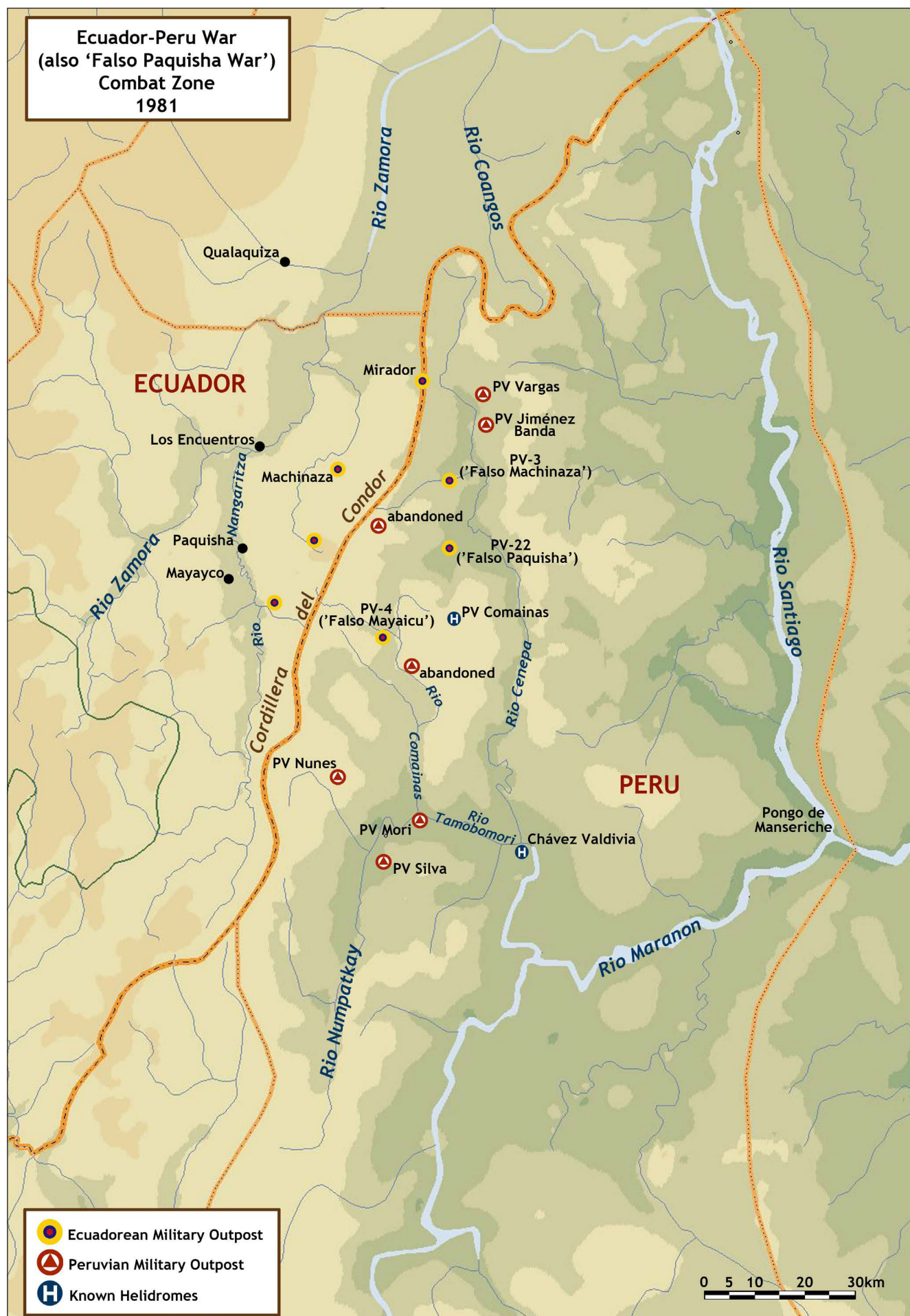
A pair of pristine looking SEPECAT Jaguar ES fighter-bombers departing from the BAe factory and test centre at Warton in the UK, prior to delivery to the FAE in the late 1970s. (BAe)



A formation of Dassault Mirage F1JAs shortly after their delivery to the FAE. The F1 remained in service between 1979 and 2011 when they were definitively retired. (Photo by Jorge Delgado)



An Su-22 from EA 111 landing at El Pato AB in the early 1980s. Note the Sukhoi OKB emblem painted on the tail. (DINIA)



A map of the Cordillera del Cóndor area, the combat zone of the Paquisha War of 1981. Notable is the row of outposts taken over or constructed by the Ecuadoreans east of the Peruvian border, with the aim of mimicking outposts and populations on their side of the lines. (Map by Tom Cooper)



An impressive aircraft line at El Pato AB in late 1979 composed of Cessna A-37B, Mirage 5P3 and Su-22 aircraft. (IEHAP)



Image taken on 19 April 1978 during the course of testing of locally produced napalm containers dropped by a Cessna A-37B from EA 411 over the La Joya AB gunnery range in Arequipa. (Photo by Jorge Velasquez)

Paez outside Salinas, Simon Bolivar in Guayaquil, and Manta outside Manabi.

Finally, on 20 January 1981, the Mirages of GA.6 were reinforced by the arrival of three Canberra B(I).Mk 8s from the EA.921.

In order to improve the security of its communications, during preparations for *Operación Rechazo*, the COMOP prepared its own 'blue book': a set of coded instructions to be used in radio communication to identify either enemy or friendly aircraft expected to participate. The list of known code-names for the FAP aircraft is provided in the Table 10. The same document included a set of codenames for several of FAP's forward operations bases (FOBs). Those known are listed in the Table 11.



The enormous size of the Mi-6 "Hook" can be seen in this image taken during the blade replacement process performed inside the facilities of GA N°3 in Callao. (Photo by José Barrera)



Troops exiting the huge fuselage of a Soviet built Mi-6 "Hook" serial FAP 679 as it touches the ground during an air assault exercise taking place as part of Operation UNITAS XXV in the late 1980s. The Mi-6 allowed the fast transport of troops and supplies during the 1981 conflict. (Photo by Kirby Harrison)



In the early 1980s the venerable Douglas C-47 was still in service with Peruvian Air Force. This weary airframe was seen at Iquitos in 1980. (Photo by Stephen Aubury)

4

ESCALATION

The tensions between Ecuador and Peru of January 1981 did not happen all of a sudden, nor in a vacuum; they had been gradually building since the mid-1970s. Moreover, they were not limited to public statements by politicians, but actually included constantly increasing activity on the ground and in the air.

Clashes of 1977–1978

In 1977, a Peruvian Army border post on the Chiqueiza ravine was taken and then destroyed by the Ecuadorean Army. Indeed, on 8 July of the same year, troops of the 25th 'Callao' Mountain Infantry Battalion (Batallón de Infantería de Selva No. 25 Callao, BIS.25) of the Peruvian Army found an area of about 1,000 square metres in the middle of the forest on the Peruvian side of the border cleared of all the vegetation: in the centre of that area they found an Ecuadorian flag and the inscription 'Long Live Ecuador'. A few months later, a patrol from the same unit underway on the Peruvian side of the Condor

mountain range found itself surrounded by a superior Ecuadorian unit and surrendered: the troops were released several days later. Finally, on 1 December 1977, a patrol of the Peruvian Army surprised a patrol of the Ecuadorian Army near PV *Illave*, on Peruvian territory, and arrested them. Like Peruvian troops before, so also the Ecuadoreans were released a few days later.

On 1 January 1978, a reconnaissance patrol of the BIS.25 underway in the Condor mountain range discovered an elaborate camp – including several barracks and storage depots made of wood, a helicopter landing spot, and the inscription 'Ecuadorean Border' (*Frontera Ecuatoriana*) – just three kilometres northeast of the Peruvian Army's base Jiménez Banda. In order to prevent the Ecuadorians from making use of this facility, the head of the Fifth Military Region (Quinta Región Militar, 5.RM) of the Peruvian Army ordered its permanent occupation, on 12 January 1978. The Ecuadoreans returned less than a week later: during the night from 17 to 18 January, their troops – assisted by at



Line of Su-22 parked on the tarmac of El Pato AB in the early 1980s. Note their camouflage pattern. (Author's collection)

least one helicopter – assaulted the Peruvian troops that had secured the captured base. However, their attack was quickly repulsed.

Of course, such Ecuadorean attacks resulted in a severe crisis between the two countries and an exchange of – often fierce – diplomatic protests. However, thanks to enormous efforts of both governments a conflagration was avoided. Indeed, on 20 January 1978, the Chiefs-of-Staff of both armies reached an agreement for a withdrawal of their forces within 30 miles of the observation posts closest to the border in the Condor mountain range.

Observation Posts

A deployment to an observation post in the Condor mountain range during this period was widely considered a 'punishment' in the Peruvian armed forces. The terrain was extremely rugged, and the local soil grew nothing but bushes. Due to the absence of natural resources and their geographic isolation, garrisons were overly reliant on resupply by helicopter – an operation usually taking place every 30 days. Late deliveries could result in hunger or food spoilage. Whenever that happened, the lieutenant in charge of the post would send his troops to the nearby streams to catch some of the *carachamas* – small fish full of bones: whatever the soldiers caught was then collected into the into the common *Paila* (a large boiling or cooking-pan) at the end of the day, boiled in salt-water and eaten. More often than not, this was a risky prospect, the troops returned empty handed and, worst of all: even more exhausted and hungry.

An unsurprising consequence of such experiences, but also of the agreement from 20 January 1978 was that the CCFFAA concluded it impractical to maintain permanent occupation of all the observation posts along the border with Ecuador: just resupplying the troops there was a major challenge and a drain of resources for both the army and the air force.

On the contrary, the Ecuadoreans drew their own conclusions. Both the political establishment and the army had developed their own plan, driven by the idea that it was their legal right to infiltrate the area with a growing number of their forces, occupy border posts abandoned by the EP and thus gradually establish presence in the 'disputed' territory. Border posts were subsequently to be heavily fortified and resupplied by helicopter. Simultaneously, the Ecuadorean authorities began claiming that the Peruvians were invading its territory. This is exactly what Quito began doing in 1979, resulting in a stream of reports by the Peruvian intelligence services about the growing presence of foreign forces on its soil. Even then, the EP remained reluctant to send their troops back, and thus it was only in

January 1980 that the contact between the Peruvian and Ecuadorean ground troops was renewed. Although no casualties were recorded, the tensions began rising once again.

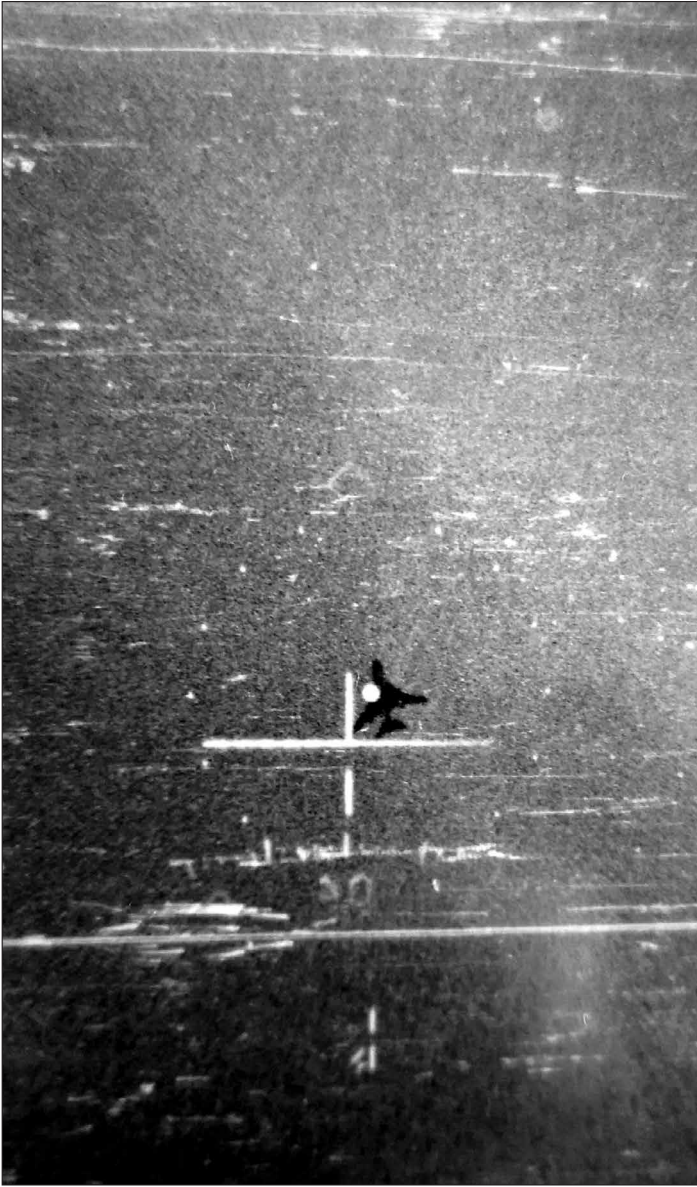
First Contact

Early on 11 January 1981, the commander of the PV *Comainas*, Sub-Officer Homero Bocanegra Castagnola, raised his superiors on the radio to report the activity of Ecuadorean helicopters north of his position – over an area at least nominally under the control of BIS.25. A few days later, early on 22 January 1981, an Mi-8T helicopter from the *Batallón de Asalto y Transporte 811* (Transport and Assault Battalion) flying on a supply mission between the PVs *Teniente Pinglo* and *Chávez Valdivia*, came under machine gun fire while overflying the valley of the River Comainas – still well inside the Peruvian border and the Condor mountain range. The helicopter's mechanic returned fire with his AK-47, with unknown results. Back at the *Teniente Pinglo* base of the EP, about 30 minutes of flight distance, the crew of this helicopter provided a full report to their superiors.

While this was going on, another patrol of Peruvian troops ran across a patrol of the Ecuadorean Army, and a fire-fight ensued (without casualties on either side), while an unarmed helicopter of the EP came under small-arms-fire when underway between the PVs No.3 and No.4: both of these were in the valley of the Comainas River, nine miles (14.5km) inside the Peruvian territory, and abandoned since 1977. This time, at least one bullet found its mark and damaged the main rotor blade. After taking evasive action, the pilot, Major Ruben Polanco Pacheco, flew straight to the *Teniente Pinglo* base of the EP, to inform his superiors.

As the news of these clashes reached Lima, the CCFFAA reacted by putting all three branches of the armed forces on alert and requesting its forward-deployed units to provide as much detailed information as possible. The High Command's next decision was to order the FAP to provide air support to the units deployed in the crisis zone, and for the 8th Infantry Division of the EP headquartered in Lobitos (about 15 kilometres/9.3 miles north of Talara) to prepare for deployment to the border with Ecuador.

The first assets available were Bell 47G, Bell 212, Mi-6A, and Mi-8T of the Callao-based EC.341 and 332 (both from GA.8), which were already nearby because they were supporting oil-exploration operations by the Occidental Petroleum Corporation (OXY) in the Amazon basin. Next, GA.11 at Talara AB and GA.6 at Chiclayo were put on alert, because both were expected to become the primary targets for FAE air strikes in the event of wider hostilities. Moreover,



A still from the gun camera installed aboard a Mirage 5P3 shows the results of a mock combat held between a Sukhoi Su-22 from EA 111 and a Dardo from EA 612. (Photo by Roberto Ruiz)

the High Command FAP imposed a ban on commercial flying within the entire airspace for 312 kilometres (200 miles) from the border to Ecuador to Talara, starting from 15 January 1981. In this way, the *Mosaico Nacional* IADS and the TNCC had it much easier to discern between enemy and friendly aircraft and helicopters, and there was no danger of anybody opening fire at civilian aircraft.

Faulty Intelligence

One of the most urgent requirements for the entire FAP during the first few days of the crisis was to update its intelligence picture about potential targets in Ecuador. For example, it lacked latest information on a possible FAE deployment at what the Peruvians knew as the 'Seymour AB', on the Galapagos archipelago.¹ Therefore, the COMOP ordered the FAP to fly a photo-reconnaissance mission by one of its Canberra B(I).Mk 8s from EA.921. The mission was undertaken by the crew of Major Palomino, in a bomber equipped with photographic cameras in the rear fuselage. Palomino took off from Chiclayo early on 21 January and was initially escorted by two Mirage M5P3s of EA.612 (serials 119 and 184), flown by Captain Mimbela and Lieutenant Ruiz, and armed with R-3S air-to-air missiles. Although the Mirages had to turn back early, well before reaching the Galapagos, and the Canberra thus continued entirely on its own, it completed the mission without any incidents and in complete radio silence. Indeed, on its way back, it was used by the command of GA.11 for a practice intercept by a pair of Su-22s, vectored by the TNCC in Talara. Certainly enough, not informed of the approach of two (friendly) fighter-bombers, Palomino flew violent evasive manoeuvres, and sharply descended very low over the sea, before returning safely to base. His mission revealed that the FAE did not deploy any kind of combat aircraft on the Galapagos archipelago.

A day later, on Thursday 22 January 1981, a Bell 212 from GA.3 identified with serial FAP 618 flown by Captain Jorge Guzman Olaechea, Lieutenant Mesias, and Sub-Officer Aquilino Berrocal, took off from the EP's Teniente López base (which meanwhile acted as the FOB for about a dozen FAP and EP helicopters). After a 33 minute flight, the helicopter reached *Teniente Pinglo* VP, where it picked up Captain Gustavo 'Gusy' Eberman Tremolada: the latter had completed his tour of duty at this position and received the orders to return to Lima. Simultaneously, an Mi-6 (FAP 677) and Bell 212 (FAP 602) were tasked with flying reconnaissance along the Comainas River to obtain



FAP's logistic nightmare in one single picture. 23 Su-22, 12 Mirage 5P3, ten Cessna A-37Bs, four Mi-6 and at least three Mi-8 can be seen parked on the tarmac of Teniente General FAP Armando Revoredo Iglesias AB in Callao in the early 1980s. (IEHAP)



A formation of Mirage M5P3s, belonging to Air Group N°6, during a routine flight in early January 1981. The P3 suffix denoted the presence of a series of minor improvements to the original Mirage 5's navigation and communication systems fitted to FAP aircraft during the late 1970s. (IEHAP)



12 Su-22s from EA 111 were deployed from Talara to Las Palmas AB with the dual purpose of dispersing aircraft against a potential attack by FAE units and, in accordance with the Peruvian armed forces operational doctrine, to serve as countermeasure to the threat posed by any possible attack from the south by the Fuerza Aérea de Chile. (Photo by Ricardo Iraola)



A Canberra B.Mk 68 from EA 921 seen parked at Capitán FAP Renán Elías Olivera AB in Pisco in early 1981. Three aircraft from this bombardment unit were deployed to Chiclayo to take part in the conflict, with one of them taking part in a daring reconnaissance sortie over the Galapagos. (Photo by Rolando Cárdenas)

concrete proof of the infiltration by Ecuadorean forces, and report the enemy position to the HQ of 5.RM. For this purpose, both helicopters first had to re-deploy to the army outpost near Chavez Valdivia.

While – considering the urgency to obtain intelligence on Ecuadorean activities and positions – one might expect something else, the only other helicopter patrol over the combat zone by the EP and the FAE on that day was conducted by a lonesome SA.315 Lama helicopter, flown by Lieutenant Victor Valencia: this had delivered Major Galo Monteverde to the Paquisha VP, around 11:45hrs.

Maximum Alert in Ecuador

The fact that the CCAAFF had put the Peruvian armed forces on alert did not escape the attention of the decision-makers in Quito. On the contrary: on 22 January 1981 the Ecuadorean President Jaime Roldos Aguilera reacted by placing the Ecuadorean armed forces on alert. Correspondingly, all commanders of major units were tasked with briefing their subordinates about the 'fighting in the Cordillera del Cóndor' range. Much to the dismay of many an Ecuadorean general, the situation caught the FAE's



A top view of Mirage 5P3 serial FAP 184 taken from the control tower at Teniente Coronel FAP Pedro Ruiz Gallo AB in early 1981. (DINIA)



A view showing the impressive size of the Mi-6 "Hook" transport helicopters parked at GA N°3 in the early 1980s. Nearly all the aircraft appearing in this image took part in the actions over the Condor mountain range. (DINIA)



After the start of hostilities on 22 January, a pair of Canberra B.Mk.6s from EC 1112 were quickly readied and put in operative condition at Quito. By this time, all had their former high-speed silver finish repainted with the South-East Asia camouflage pattern. Two were then quickly re-deployed to Seymour AB in the Galapagos. A third B.Mk.6a, FAE 504, joined the detachment a few days later after completing repairs. Flying from Galapagos, these bombers were assigned with both Talara AB and Jorge Chávez Darnell international airport as primary objectives in case the conflict scaled up into a full war. This picture was taken at Mariscal Sucre AB in Quito shortly after the end of the conflict. (Photo by Jorge Delgado)

primary strike force – the Canberra-equipped EC.1112 – on the wrong foot. Lack of funding had resulted in a lack of spares, which in turn grounded most of the aircraft. As of 22 January 1981, only two aircraft – serials FAE 405 and FAE 411 – were available for operations, while the third, serial FAE 509, was awaiting inspection and had several major components disassembled. Indeed, the unit was forced to recall a number of technicians qualified on the Canberras, but meanwhile serving with other units, to help bring other bombers into operational condition. While this was going on, the ground crews re-painted the two operational aircraft in tan and two shades of green,

following the so-called South-East Asia camouflage pattern of the US Air Force.

The FAE High Command in Quito was not ready to wait, though and next it ordered both of the available bombers to re-deploy to Seymour AB on the Galapagos. For this purpose, they first flew to Manta, late in the evening, before continuing their flight on the next day. By sheer accident, the Ecuadoreans thus outmanoeuvred the Peruvians: they had two bombers deployed on an airfield previously reconnoitred by the FAP, i.e. in a position from which the Peruvians did not expect any kind of a threat.

The rest of the FAE seems to have been in a better condition and proceeded with preparations for a possible war with Peru as planned. For the purpose of support of the ground forces inside Peru, most of the available aircraft and helicopters were assigned to the control of the 1st Air Zone FAE, commanded by General Frank Vargas Pazzos.

Clash of 23 January

Early on 23 January 1981, numerous helicopters of the EP and the FAP became airborne. Flying at an altitude of about 150 metres (500ft) above the trees, the first of them – the Bell 212 with serial 618 – passed above PV-3 and PV-4, before landing back at Comainas, where its crew coordinated their next mission with Colonel Mario 'Califa' Muñiz Ortega, commander of GA.3. The same helicopter was airborne at 13:23hrs local time again. While heading for PV-3, and after passing only 8 kilometres (5 miles), its pilot called the base on the radio to

report a previously unknown, makeshift outpost including two small 'buildings' and a landing spot for a helicopter, just 5 kilometres (3.1 miles) away from PV-3. Seconds later, the helicopter came under fire, which its mechanic promptly returned. On the ground, the crew of an FAE Lama helicopter composed of Lieutenant Victor Valencia and Major Monteverde, came under fire from an FAP helicopter and, as a result, Lieutenant Valencia was hit in the head thus becoming the first fatality of the conflict. Upon further inspection, the Lama, which had landed at this position at 11:45hrs, had sustained a bullet hole to the fuel tank which, fortunately, did not explode.



On 20 July 1979 the Cessna A-37Bs assigned under the command of Escuadrón de Combate 2112, Ala de Combate N°21 (N°21 Combat Wing) in Taura AB, were transferred to Eloy Alfaro AB and placed under the command of Ala de Combate N°23 (N°23 Combat Wing) as the Escuadrón de Combate 2311. Notable on this example is the application of the new unit's insignia on the rear fuselage, near the refuelling point. (Photo by Jorge Delgado)



AdE 316 was one of the seven Aérospatiale SA-316 "Lamas" acquired by the Ejército de Ecuador. These helicopters flew a pair of M45 quad gun mounts to PV-22/"Falso Paquisha" and "Falso Mayaicu". (Photo by Jorge Delgado)



Pilots from EA 612 seated on the 1700-litre underwing tanks fitted to this Mirage 5P3 of the unit. (Photo by Roberto Ruiz)

Emergency Response

After flying back to PV *Teniente Pinglo*, Monteverde filed a complete report to his group commander, who had just arrived there. The same report was promptly forwarded to General Rafael Hoyos Rubio, commander of the 8th Division EP, in Callao, who in turn forwarded it to Lima. Less than one hour later, the escalation was discussed between the generals of the CCAAFF and President Belaunde Terry: in turn, they reached the decision to order 5.RM to promptly reinforce available troops in the crisis zone. During the evening of 23 January 1981, Bell 212 serial 618, and Mi-6A serial 684, were thus used to collect 35 troops of BIS.69 from PV Chávez Valdivia and 50 from

Comainas, and fly them to the newly-discovered Ecuadorean observation post, now re-designated as PV-22 by the Peruvians.

As this operation was going on, a major crisis was developing Talara. Around 23:00hrs, the ground controller in the TNCC detected a 'bogey' (unknown aircraft) departing from Quito and heading south-west at a speed of 800km/h (497 miles per hour). Although the airspace over northern Peru was already 'cleared' of civilian airliners, the officer on duty first made a telephone call to the local HQ of the Peruvian Airports and Commercial Aviation Corporation (*Corporación Peruana de Aeronautica y Aviación Comercial*, CORPAC), to make sure if there was still any kind of a commercial flight underway. There was no answer. Meanwhile, under the assumption that the incoming bogey was a possible Canberra B.Mk 6 of the EC.1112, FAE heading for a night strike on Talara, the crews of the three SA-3 SAM-sties were all put on alert. The SAM-operators trained their missiles on the incoming target and waited for the order to open fire.

Minutes of extreme tension passed while the officers at the TNCC in Talara continued making calls to the CORPAC HQ in a frantic attempt to determine the identity of the unknown aircraft approaching them. Finally, and virtually 'seconds' before the SA-3 battery open fire, a civilian operator identified the 'intruder' as a passenger aircraft of the Dutch KLM airline on a scheduled flight from Quito for

Lima. Obviously, the crew had not been informed about the Peruvian ban for commercial flight over the north of their country.

Actually, and as described above, there were next to no operational Canberras left in Ecuador at that point in time. Surely enough, the technicians of EC.1112 had finally – after almost 48-hours of hard work – managed to power up the second engine of Canberra serial number 509, around 18:00hrs. However, the crew of the bomber was subsequently preoccupied with running the usual tests with their aircraft, and then re-deploying to Manta AB, instead of preparing for a combat sortie. On the next day, the Canberra B(I).Mk 6 serial number 506 was made operational too, and both of its engines tested



An Su-22 from EA 111 drops its ordnance during a practice bomb-run over GA N°11's gunnery range in Talara in early 1981. (photo by Carlos Portillo)



A 5V24 (V-600) missile is fired from a S-125 Pechora battery during a drill performed in the early 1980s. The 5V24 were two-stage missiles, powered by solid fuel rocket motors that could reach a top speed of Mach 3.5 in flight and were guided towards their target by radio command. Note the Almaz SNR-125 (NATO reporting name "Low Blow") engagement radar in the far right. (Photo by Carlos Portillo)

at the Mariscal Sucre AB. Once everybody was satisfied, this aircraft was also ferried to Manta AB.

Additional Reinforcements

By the morning of 24 January 1981, the media on both sides of the conflict began to inform the population about what was going on in the Condor mountain range. Of course, each did so in an entirely different fashion. In Ecuador, the official version was that a Peruvian helicopter had violated Ecuadorean airspace near the Mayaicu border post (known as the Mayaicu Detachment) and Paquisha (an Ecuadorean

village about 15km/9.3 miles from the border), and that the Ecuadorean ground forces had shot it down. In Peru, the story was that an EP helicopter patrolling the PV Nos. 3 and 4 was hit by Ecuadorean troops that had penetrated Peruvian territory, that it sustained damage, but returned safely to base. With nationalist feelings flying high, the situation was certain to rapidly heat up. In Lima, President Belaunde Terry held another meeting with the CCFFAA, during which the Chief-of-Staff FAP, Lieutenant-General Luis Arias Graziani briefed everybody on the situation along the border. Dissatisfied by the levels of available information, Belaunde Terry demanded additional reconnaissance and the collection of precise intelligence on the Ecuadorean forces deployed in the Condor mountain range before making any further decisions. Correspondingly, the CO GA.3 received the order to link up with the National Aero-Photographic Service (Servicio Aerofotográfico Nacional, SAN) and run a thorough photoreconnaissance of the crisis zone.

Meanwhile, Peruvian helicopter crews already in the zone were busy hauling all available reinforcements to the frontlines. For example, early on 24 January 1981, Mi-8T serial number 618 and Mi-6A serial 684, transported a company of troops to Chavez Valdivia EP base, while an An-26 (serial 392) brought the senior staff of Air Wing No. 1 (Ala Aérea No. 1, ALAR.1) and additional staff personnel from Lima to Talara.

Califa's Reconnaissance

Early on 25 January, Colonel Muñiz "Califa" Ortega embarked a Gates Learjet 25B (serial 523) at Las Palmas AB. After refuelling at Chiclayo, he took off again and – escorted by a pair of Mirages from EA.612 (serials 184 and 192, flown by Major Gustavo Romero and Captain Federico Hayes) – flew a reconnaissance sortie of the combat zone. Meanwhile, two further Mirages – serials 183 and 112, flown by Commander Carlos Bernalles and Lieutenant Roberto Ruiz, respectively – attacked the Ecuadorian troops at the PV-22 with their DEFA internal cannons in what was the first combat sortie of the FAP since July 1941.

This attack was also monitored by Captain 'Gusy' Eberman, underway on board the Bell 212 serial number 618. Indeed, next 'Califa' requested Gusy to mark PV-22 with white smoke. Eberman followed his order but while approaching the target zone ran into an Ecuadorean SA.315 Lama. Fortunately for both crews, their helicopters were unarmed and distanced without engaging: having lost the element of surprise, Eberman was not keen to expose his gaudily-painted helicopter to additional enemy fire. Nevertheless, while tracking the movement of the clearly visible Bell, 'Califa' was able to take precise photographs of PV-22 and the surrounding area: after returning to Chiclayo, these were promptly delivered back all the way to Las Palmas on board a DHC-5 transport of ET.842, and then developed by the Aerial-Photography Direction of the FAP (Dirección de Aerofotografía, DIRAF) for development and analysis.

Falso Paquisha

The photographs obtained in this fashion were presented by Colonel Muñiz personally to President Belaunde Terry, early on the morning of 26 January. They provided clear confirmation of an Ecuadorean infiltration more than 11 miles deep into Peruvian territory. They supported intelligence reports about the Detachment Mayaicu including about 30 Ecuadorean troops supported by one helicopter. Outraged, Belaunde Terry ordered the armed forces to recover the site: the 'H-hour' – the starting point of the counteroffensive – was set for 07:30hrs of 29 January 1981.

Immediately after, the Peruvian government launched a diplomatic



A Gates Learjet 25B from EA 331 seen at Las Palmas AB in 1981. A pair of Learjet 25Bs, identified with serials FAP 522 and 523, were purchased in 1974. The later took active part in the conflict being instrumental in the discovery of Ecuadorian infiltration of the Peruvian sector of the Condor mountain range. (IEHAP)



Lieutenants Ruiz and Seabra, pilots from EA 612, portrayed seated at the access door of Learjet 25B serial FAP 523 during a pause in operations at Teniente Coronel FAP Pedro Ruiz Gallo AB in Chiclayo on 24 January 1981. Note the presence of the Soviet-built Kremnij-2(2M) IFF aerals on the lower nose section of the aircraft. (Roberto Ruiz Collection)

offensive. By showing reconnaissance photographs to the press and the international community, the officials were able to provide 'an undeniable proof of a violation of the Peruvian sovereignty'. Lima thus issued an ultimatum upon Quito to withdraw its forces within 48 hours, or face consequences. The Ecuadorean response arrived before long and was predictable: the 'border post' in question was the village of Paquisha, well inside Ecuadorean territory, and it was Peru that was invading Ecuador. From the Peruvian point of view, this was clearly a strategy of 'double toponymy': henceforth, PV-22 became known as the '*Falso Paquisha*' ('Fake Paquisha').²

IFF-Problems

In the meantime, the pace of Peruvian aerial operations increased by a notch further. The crews of Bell 212 serial number 618 and Mi-8A serial number 684 spent 26 February 1981 ferrying supplies and troops between the Teniente Pinglo and Chavez Valdivia bases. They were meanwhile supported by a single An-26 (serial number 391), which brought in 500kg (1,102lbs) of supplies from Lima. Moreover, Naval Aviation Squadron 12 (Escuadrón Aeronaval, EA.12) of the Peruvian Navy re-deployed six of its Grumman S-2E Trackers from Chiclayo to Talara, together with 60 ground-support personnel. While it might appear as unusual to deploy these anti-submarine aircraft this deep inland, their range enabled them to fly extended patrols over the combat zone and monitor Ecuadorean movements for hours. The

only problem was that the identification friend-or-foe (IFF) systems installed on the S-2Es proved incompatible with those installed in FAP radars and aircraft. Thus, the commander of Naval Aviation, Admiral Vargas Prada, and the CO of the GA.11, Colonel Cesar Gonzalo Luzza, had to arrange for S-2Es to enter and exit the combat zone by flying along a very specific zig-zag route, changing course every two minutes, in order to avoid friendly fire.

Rather unsurprisingly, even this arrangement proved insufficient. Late the same evening, a pair of Su-22s was scrambled after the early warning radars of the NTCC detected an 'unidentified' aircraft approaching from the north. The two fighter-bombers quickly reached their 'target', and the leader was about to attack, when the wingman identified it as a 'naval Tracker'. This was already the second close call of this crisis.

Final Preparations

Even more activity followed on 27 January 1981. Early in the morning the Learjet serial number 525 departed from Chiclayo for another reconnaissance sortie. Once the business jet was outside the danger zone, the two escorting Mirages – serials 183 and 184 – returned to strafe the Ecuadorean positions at PV-22 with their DEFA cannons, all the time closely monitored by Captain Eberman underway in his Bell 212 serial 618. With the Ecuadoreans forced to take cover, Gussy then flew closely enough for one of his crewmembers to take a series of close-up photographs of the fake border post. President Belaunde Terry was thus to receive a definite confirmation of the enemy infiltration.³

Meanwhile, in the course of a meeting by commanding officers of GAs 6, 7 and 11, top FAP ranks had agreed to primarily use A-37Bs from EA.712 for the provision of close air support of the ground forces: although based closer to the combat zone, the Su-22s were much too fast to search for their targets. Correspondingly, 'Califa' Muñiz was sent to Capitán FAP Guillermo Concha Iberico AB, outside Piura, to brief the crews of that unit about the topography and planned operations. Finally, the COMOP declared a 'blue alert' for all the units, meaning that all leave had been cancelled and hostile encounters with Ecuadoreans had to be expected.

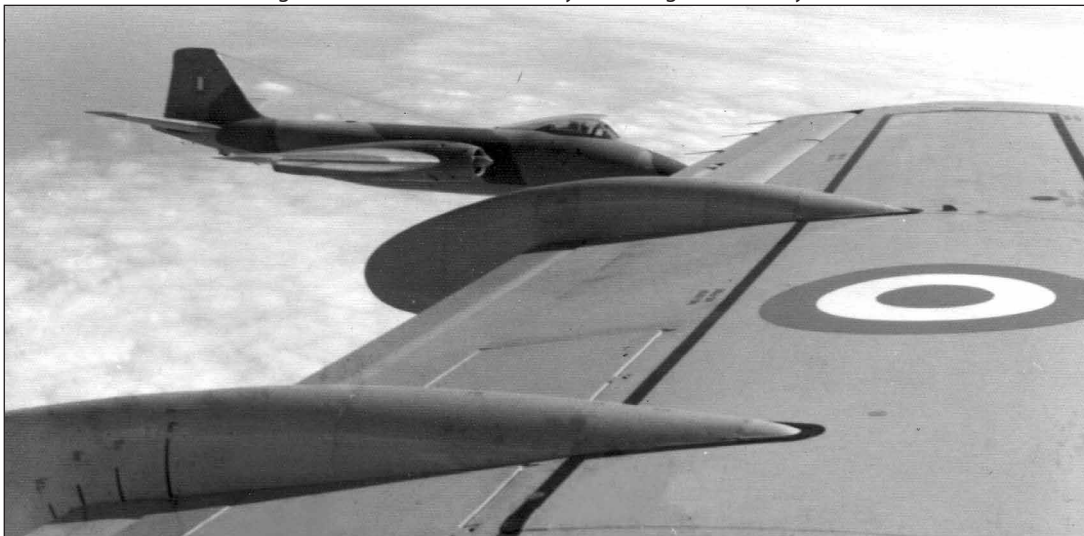
Having received additional reconnaissance photographs, during the afternoon the Foreign Minister of Peru requested a formal explanation from the Ecuadorean government via the country's ambassador in Lima. Once again, the response was rather ironic: it contained a statement claiming the invalidity of the Rio de Janeiro Treaty, and a



MGP Naval Aviation took part in the operations deploying six S-2E Trackers from Escuadrón Aeronaval N°12 (N°12 Naval Aviation Squadron) which arrived in Talara on 26 January 1981. (Photo by Juan Arraez)



Formation display of a Mirage M5P from Grupo Aéreo N°6 held at Chiclayo in the early 1980s. Note the leading aircraft – still in its original French tactical scheme – armed with R-3S missiles displays a diverse array of air-to-ground ordnance, including some of Soviet origin, which could be carried by the Mirages. (Photo by Juan Villena)



A BAC Canberra B(I).Mk.8 from EA 921 escorts a FAP Fokker F-28 which was carrying Peruvian President Fernando Belaunde to Chiclayo in late July 1981. (IEHAP)

demand for unlimited access to the Amazon and Marañón Rivers. President Belaunde Terry then set up a press conference in the course of which he not only provided clear coordinates of the Ecuadorean

infiltration, but also close-up photographs of PV-22, thus fully exposing the enemy plan. It was during this conference, on the afternoon of 27 January 1981, that he used the designations such as 'Falso Paquisha', 'Falso Mayaicu', and 'Falso Machinaza' to designate the Peruvian posts occupied by the Ecuadoreans for the first time in public.

Much less is known about what exactly the commanders and other personnel of FAE were units doing during those dramatic days. The Commander of Ala de Rescate 221, based at Simon Bolivar AB outside Guayaquil, is known to have ordered his ground crews to camouflage the local fuel storage depot, dig out trenches, and deploy a battery of Bofors 40mm anti-aircraft guns at both ends of the runway for air defence purposes. It is probable that similar precautions were undertaken at other FAE air bases. The Ecuadorean Navy is known to have been activated and to have deployed several of its warships closer to the border with Peru. This is how another close call caused by misidentification of friendly aircraft and vessels occurred. In the Ecuadorean case, the BAE *Hualcopo*, an LST-542-class tank landing ship heading for Puerto Baquerizo Moreno, was intercepted by a pair of A-37Bs from EC.2311 of the FAE. The captain of the vessel promptly ordered his crew to battle stations, while trying to verify the identity of approaching aircraft: the alert was cancelled only after the trigger-happy gunners fired several shots at the low flying jets, fortunately without effect.⁴



A trio of Antonov An-26 "Clints" from EA 843 seen resting on the tarmac of Grupo Aéreo N° 8 in Callao in the early 1980s. Underpowered for Hot and High operations, typical of Peruvian territory, An-26s didn't live up to FAP expectations and by the end of the decade the survivors were sold and replaced by the far more powerful and capable Antonov An-32. (IEHAP)

5

AERIAL OPERATIONS FROM 27 JANUARY TO 4 FEBRUARY 1981

With the armed forces of both parties being put on alert and in the process of moving their assets into combat positions, the Second Ecuador-Peru War began on the morning of 27 January 1981. With this conflict – just like all the affairs related to the border dispute between the two countries being surrounded by an incredible amount of myth, rumour, and pure conjecture, and emotions running high whenever these are discussed, the lines between the facts and fantasies became heavily blurred. Therefore, instead of the usual – yet certainly controversial – narrative, the best way of covering the air war of 1981 is in the form of transcriptions of the official documentation. Obviously, the following account might appear 'biased in favour of Peru'. Actually, the simple matter of fact is that the Ecuadorean documentation remains outside public reach and that most of what has become available in this regard over the last 40 years are memoranda, orders, and post-mission reports saved in the archives of the Peruvian Air Force.

27 January 1981

At 06:30hrs in the morning, the HQ of GA.7 at Piura issued the Operations Order GRUP7-002-81, which specified tasks for subordinated units. Correspondingly, the flight crews promptly began planning their operations, while ground crews assigned to the Maintenance Squadron 706 (Escuadrón de Mantenimiento 706) finalised their work on the aircraft and began loading these with armament. Due to the lack of batteries for tractors assigned to GA.7, other crews took care to push nine grounded aircraft away from the tarmac and to camouflage them. All of these tasks were completed on schedule.

At 10:15hrs, Lieutenant Luis Viale – a former Mirage 5P pilot now designated to serve as the forward air controller (FAC) – reported to the commander of EA.711: after receiving the

frequencies and calls-signs of the formations he was about to direct, he embarked a DHC-5 and was flown to Ciro Alegria airfield, where he arrived at 12:30hrs. Thirty minutes later, 'Califa' – accompanied by several formation-leaders from EA.712 – took off from Ciro Alegria with his Bell 212 and headed for the Comainas area to familiarise everybody with the terrain around PV-22, and also PV Nos. 3 and 4. He landed safely at Comainas at 13:30hrs and, after debriefing, the pilots from EA.712 were flown back to Piura on board DHC-5 serial number 813.

At 15:24hrs, the Peruvian troops deployed near PV-22 reported an Ecuadorean helicopter departing the outpost and then performing a reconnaissance patrol over the area, before distancing towards the north. Apparently, the same helicopter then returned to Falso Paquisha at 16:30hrs.

At 18:00hrs, a major meeting of all top commanders from all of the involved FAP and EP units was held at Talara, where final details for an aerial assault on the Ecuadorean outpost were agreed. The site was to be subjected to an attack of airborne and heliborne troops on the following day, and the plan for this operation was relatively simple. Gusy Eberman was selected to lead this operation because of his experience and knowledge of the local terrain: he was to lead



A Mirage 5P3 captured on film during the course of a patrol over the Condor mountain range in late January 1981. The sand and brown camouflage of this Mirage 5P3 from EA 612 stands out against the green landscape of the operational area. (Juan Arraez)

a formation of EP Mi-8T in his – still unarmed – Bell 212. The Mi-8s were to saturate the Ecuadorean fortifications with fire from their UB-32-57 pods for S-5 57mm unguided rockets, and then deploy assault troops. Meanwhile, ‘Califa’ Muñiz was to coordinate close air support provided by A-37Bs of EA.712, armed with incendiary bombs and unguided rockets. Correspondingly, the commanding officer (CO) of GA.3 was ordered to deliver optical sights, rocket pods and unguided rockets for helicopters to the Comainas FOB, where the ground personnel were not only to install these, but also to expand the area that could be used for the landing of such large helicopters as the Mi-6A.¹

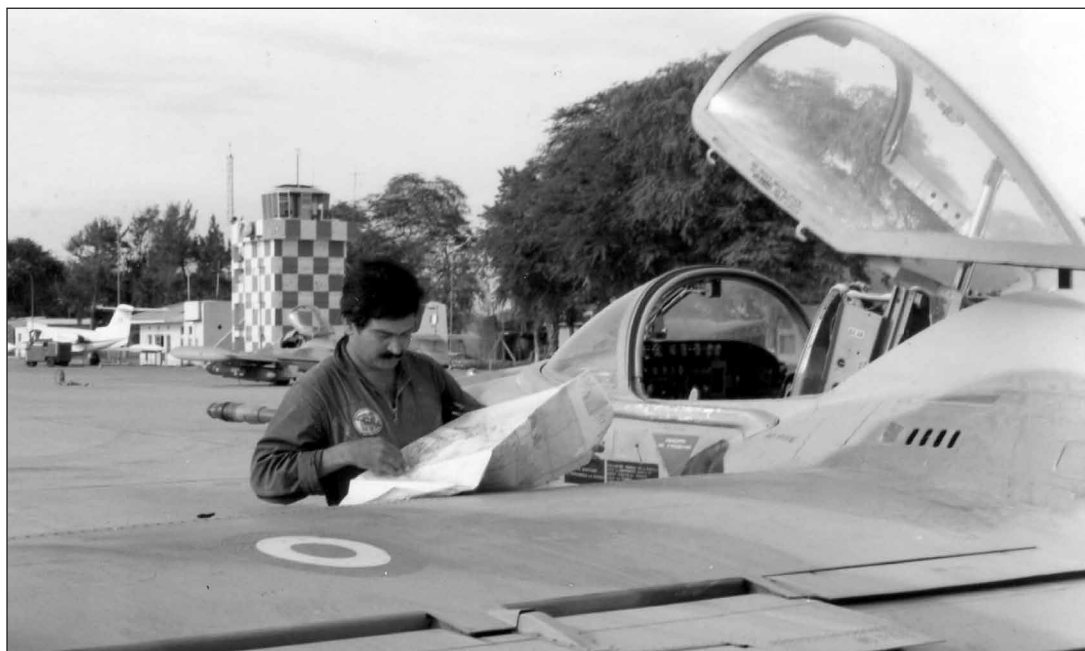
Working feverishly, the ground crews from the EA.332 installed a pair of 7.62 MAG machineguns on flexible mounts on each side of the unit’s Bell 212s, plus a total of four LAU-68A rocket launchers. As these operations were in full swing, around 18:30hrs, an Aerospatiale SA.330 Puma helicopter of the AE (serial number AE 456) suddenly approached from the north and orbited near Comainas for a few minutes before distancing. All the available personnel were promptly put on alert and – armed with FN-FAL 7.62mm assault rifles – ordered to take up defence positions. Finally, late in the evening a team equipped with SA-7 Grail man-portable air defence systems (MANPADS) arrived to bolster the air defence of this forward operating base.

28 January 1981

Early in the morning, 30 additional EP troops arrived in Comainas on board one of the Mi-8Ts. After the final briefing by Colonel Delgado and Commander Brun – two commanders of the ground element – the assault force embarked its helicopters: Captain Eberman took off at 08:25hrs to fly reconnaissance over the target zone. He returned at 08:40 and issued a code-word via radio to announce the start of the operation. The four Mi-8Ts of the EP then launched, loaded with 65 troops of the first wave and, after a flight of only 15 minutes along the Comainas River, reached the target zone. On Eberman’s command, all five helicopters opened fire at 09:10hrs. However, they were not able to deliver their unguided rockets precisely enough and drew



Piura, 28 January 1981. Major Marco Seabra, commander of EA 712, briefs the pilots assigned to a combat sortie about the details of the upcoming operation using a photograph of the Condor mountain range as a reference. The photograph had been taken a few days before by the crew of a Learjet 25B from EA 331. (Photo by Marco Seabra)



Major Marco Seabra checks his map on the wing of his Cessna A-37B prior to departing on a new operation against the Ecuadorean forces in the Cordillera del Condor from Capitán FAP Carlos Concha Iberico AB in Piura. Note the Learjet 25B from EA 331 parked in the background. (Photo by Marco Seabra)

heavy Ecuadorean fire in return. This forced the pilots to abandon the planned direct insertion of the troops, and disgorge these about 2 kilometres (1.2 miles) south of PV-22 – a relatively short distance from the target as the crow flies, but a very long one for heavily-loaded troops in the local terrain. The Mi-8Ts returned to Comainas to pick up the second wave of 65 troops, deployed these to the same spot as the first wave, then returned to Chavez Valdivia to re-arm and refuel, and also to pick up additional troops. They returned to the combat zone at 11:03hrs, and then rocketed the Ecuadorean positions at PV-3, reporting satisfactory results.

Down on the ground, Colonel Delgado first ordered his troops into a reconnaissance of their objective. Based on their reports, he concluded that the Ecuadoreans had more than 120 well-entrenched soldiers at PV-22, and were thus not only superior to his unit, but

also in possession of terrain advantage. Therefore, he requested that his force be extracted by the helicopters in order to pre-empt a possible Ecuadorian attack. While Delgado's force was picked up by Mi-8Ts and re-deployed to a safe distance from its objective, his reports prompted another conference of top Peruvian military commanders, this time at Iquitos.²

Later in the evening, another meeting was set up at the HQ of the 5.RM in Iquitos, where the commanders – now including the Head of the CCAFF, General Ramon Miranda Ampuero, and the CO ALAR.2, General Jorge Carbonell Pasco – ran a detailed analysis of the situation, and decided upon a new course of action. Here the decision was taken to sort out the crisis by military means before any kind of an international intervention would be possible.³

First Air Combat

Meanwhile, the FAP and EP helicopters from Comainas continued their operations. At 14:00hrs, Gusy Eberman led a pair of Mi-8Ts in his Bell 212: they sprayed the PV-22 with unguided rockets, but in return one of the Mi-8s was damaged by small arms fire, and its crew forced to fly back to Chavez Valdivia for repairs. At 14:45hrs, Colonel Delgado then reported a fire-contact with Ecuadorean ground forces, and that his troops were outnumbered. Therefore, he requested CAS along the line connecting PV Nos. 3 and No.22. Now acting as a liaison officer, 'Califa' Muñiz forwarded this request to GA.7, and – shortly after – a strike package of six A-37Bs was prepared for action. With their pilots – including Major Klatic, Major Seabra, Lieutenants Larrea, Calle, and Maldonado, and 2nd Lieutenants Barrantes and Hudskoff already in the cockpits, they were airborne within minutes.

After launching at 15:45hrs, Major Seabra and Lieutenant Larrea in Dragonflies with serial numbers 116 and 136, respectively, were the first to reach the combat zone. After orbiting it for a few minutes, they identified their targets positively, and attacked at 16:00hrs – amid deteriorating weather conditions, through a gap in the clouds. While exiting the combat zone, they noticed the presence of another pair of A-37Bs – this time from the FAE: these were promptly reported to 'Califa'. At this moment in time, the second pair of FAP Dragonflies –



Major Marco Seabra, Lieutenant Raul Calle and other officers from EA 712 sitting on a Cessna A-37B from the unit at Piura in January 1981. (Photo by Raúl Calle)



Lieutenant Raul Calle responds to a journalist from the Peruvian media seeking details of the air combat that took place over the skies of the Condor mountain range. (Photo by Raul Calle)

serial numbers FAP 118 and FAP 125, piloted by Lieutenant Calle and 2nd Lieutenant Maldonado – entered the combat zone, and promptly started its attack on PV-22. However, as the lead aircraft dove, it came under attack from two Ecuadorean A-37Bs.

The Ecuadorean Dragonflies – serial numbers 384 and 381, flown by Captain Rommel Romo and Lieutenant Victor Pena, respectively – gained a favourable position over their enemies, and a string of tracers narrowly missed Lieutenant Calle's jet, in turn prompting him to jettison his empty LAU-68 pods and take evasive action. Seeing this, Lieutenant Maldonado dove to engage. The result was a vicious dogfight lasting seven minutes, in the course of which all four aircraft were performing hard and risky manoeuvres critically low above the local vegetation and between the mountains, as the cloud cover was getting ever thicker. Eventually, Lieutenant Calle



Piura, January 28 1981. Pilots from EA 712 rest between sorties seated on the wing of one of the Cessna A-37B assigned to this unit. (Photo by Marco Seabra)



Lieutenant Raul Calle and Second Lieutenant Hundskoff seated on top of a Cessna A-37B's 379-Litre auxiliary fuel tanks during a pause in operations from Piura in January 1981. Note the M1A1 clusters of six U.S. 20-pound (M41) fragmentation bombs fitted on the external wing rack. (Photo by Raul Calle)



Capitán FAP Guillermo Concha Iberico AB, on 28 January 1981: pilots from EA 712 waiting for orders at the dispersion area under the inclement January sun in Piura, where temperatures usually reach 42 degrees Celsius. (Photo by Marco Seabra)

performed the 'Hammerhead' manoeuvre to shake off his pursuer: in turn, the worsening weather and lack of ammunition for his GAU-2B/A machine gun, forced Captain Romo to give up his pursuit. The Ecuadorean pair thus disengaged towards their side of the border.⁴

Shaking off his opponents did not result in automatic safety for Calle. He not only lost visual contact with Maldonado but was so

short on fuel that he had to switch off one engine while heading back to Piura. He landed at the runway of Capitán FAP Guillermo Concha Iberico AB after a nerve-wracking flight, at 17:20hrs. While the pilot was debriefed, the ground crew inspecting his jet found about a dozen bullet holes in the starboard wing. Certainly enough, all were quickly patched up, but it was clear that this was a close call. Maldonado then landed too, a few minutes later, claiming one of the Ecuadorean A-37Bs as damaged: from what is known from Ecuadorean sources, at least one of his bullets holed the main spar of Pena's port wing.⁵

A Presidential Handicap

Obvious from this account of the operations is the non-appearance of the heavier FAE and FAP aircraft. Certainly enough, a pair of Mirage M5P3s from EA.612 was flying Combat Air Patrol over the combat zone: indeed, their crews were all the time listening to the action developing deep below them, but were unable to aid their colleagues due to the bad weather and the local terrain – both of which were entirely unsuitable for their high-performance jets. Moreover, the FAP was strictly prohibited from searching for and engaging hostile aircraft on the 'other' side of the border, and even more so from attacking FAE air bases: this presidential directive was to severely hamper its performance during the campaign. Finally, this encounter caused a considerable critique of the FAP's planning team: pilots not only questioned the suitability of radio frequencies assigned to them, the operational altitude for Mirage CAPs, but also restrictions imposed upon them

by the government and superior commanders.

Nevertheless, operations continued as given. Eventually, EA.612 flew 40 operational sorties on 28 January (evenly divided between CAPs and top cover), for a total of 60 flight hours. Ground personnel at Teniente Coronel Pedro Ruiz Gallo AB performed their duties flawlessly, turning around every 'Dardo' (local nick-name of the

Mirage M5P) within 15 minutes from landing, and enabling EA.612 to keep at least four aircraft airborne over the combat zone at any time of the day (usually, two were heading for the operations zone as two would be returning from it).

Still, there was no denial that these first air strikes on the Ecuadorean positions did not meet expectations: indeed, that they had failed to obtain the desired results, and that all the friendly ground troops were forced to withdraw back to Chavez Valdivia. Comainas-based helicopters of the FAP and the EP evacuated most of them by 17:00hrs, only quarter of an hour before another pair of FAE A-37Bs appeared over the area. This drew some ineffective small-arms fire from the last Peruvian troops present in the area, but foremost: their appearance prompted Colonel Delgado to request the deployment of an SA-7-team at this location.

Elsewhere, other helicopters – and transport aircraft – continued hauling equipment, reinforcements and supplies into the combat zone. Around noon, the Mi-8T serial number 677 arrived in Chavez Valdivia bringing in:

- 2 ordnance racks for Mi-8Ts
- 4 UM-32-57 pods
- 64 S-5M unguided rockets
- 64 warheads for S-5M rockets
- 30 2.75in unguided rockets
- 1 Mk.3N optical sight
- 2 FN MAG machine guns
- 400 rounds of 7.62mm ammunition.

At 14:50, the Bell 212 serial number 688 brought in:

- 2 racks for FN MAG machine guns
- 2 FN MAG machine guns
- 200 rounds for FN MAG machine guns.⁶

At 16:45, a DHC-5 serial number 328 transported following arms

- 84 2.75in unguided rockets
- 84 warheads for 2.75in rockets
- 6 twin ordnance racks
- 12 LAU-68 rocket pods
- 1 Type 252 optical sight.

The unit flying DHC-5s – EA.843 – is also known to have flown



Lieutenant Calle narrates the details of his encounter with FAE A-37Bs as Major Seabra, right, and Second Lieutenant Hundskoff listen carefully. (Photo by Raúl Calle)



Mi-8T serial FAP 678 seen at SEMAN where it underwent repairs shortly after the end of the conflict. The helicopter is armed with four UB-16-57 rocket launchers. (Author's collection)



The FAP Mi-8T assigned with civilian registry OBE-996. Early copies of the "Hip-E" flown by the FAP sported this colourful paint scheme to help with identification from the air in the event of an accident in the vast Amazon jungle. (Photo by Robert Ausbury)

and equipment from Iquitos to Ciro Alegria and El Valor air bases:

in six tonnes of equipment and supplies from Iquitos to Ciro Alegria on board its An-26 serial number 376. Finally, the DHC-4 Twin Otter from EA.421 made a number of liaison flights between Lima, Chiclayo, Ciro Alegria and Piura.

29 January 1981: Air Strikes by Dragonflies

During the first hours of 29 January 1981 General Eduardo Salhuana MacKee, commander of 5.RM, arrived in Comainas together with his staff, to improve the command and control of the battlefield and provide advice for upcoming operations, and the day saw a significant increase in the number of sorties flown by the FAP and the EP.

The first to reach the combat zone were a pair of Mi-6As, which deployed 148 troops and 3,000kg (6,614lbs) of equipment and ammunition at PV Italia at around 10:22hrs. Because the local helipad was not yet ready, their pilots – Major Armando Antezana (serial number 684) and Captain Pedro Arias (serial 683) were forced to land on a small clearing along the bank of the Comainas River instead. Rather unsurprisingly, one of the helicopters suffered some damage to the tips of its rotor blades in the process and was forced to fly back to Iquitos for repairs.

At 11:50hrs, were a pair of A-37Bs flown by Major Seabra (serial FAP 116) and Lieutenant Larrea (serial FAP 136) departed Piura. Although reaching the target zone entirely unmolested at 12:05, their pilots were unable to see anything because of the low cloud cover despite advice from a pair of Mirage M5P3s from EA.612 (serials FAP 191 and FAP 183, flown by Captain Ugarte and Lieutenant Ruiz). Ugarte and Ruiz were then relieved by Major Romero (in Mirage M5P3 serial FAP 108), and Captain Hayes (in FAP 193).⁷ Minutes later, a pair of FAE A-37Bs passed low over PV-22, obviously looking for Peruvian helicopters: however, bad weather prevented them from performing their duty effectively, and they withdrew.

At 12:15hrs, a second pair of EA.712's A-37Bs was dispatched towards PV-3. This included the aircraft flown by Major Klatic (serial FAP 124) and 2nd Lieutenant Barrantes (serial FAP 141). The later experienced an engine-related problem on take-off and was forced to make a barrier-assisted stop at the end of the runway. While the pilot came out unscratched, his aircraft suffered minor damage and had to be repaired by personnel from Maintenance Squadron 706.

At 12:40, a third pair of A-37Bs launched from Piura, this time piloted by Lieutenant Martinez (serial FAP 126) and 2nd Lieutenant Hundskoff (serial FAP 149). Armed with four LAU-68B/A pods for 2.75in unguided rockets each, they reached the Condor mountain range at 13:25hrs, but dense fog prevented them from locating any of their targets. At 13:15hrs, Major Seabra, in A-37B serial number FAP 116, led 2nd Lieutenant Larrea (in serial number FAP 136) into the next mission. This time, each aircraft was armed with two LAU-3A/B rocket pods and two US-made 250lb (125kg) CBU-26 Cluster Bomb Units (CBUs). Again, poor weather conditions over the area prevented the pilots to completing the mission.

It was only once Lieutenant Orihuela and 2nd Lieutenant Maldonado – who flew A-37Bs serials FAP 118 and FAP 125, respectively, each armed with two Mk.82 bombs and two CBU-27s – had reached PV No. 3, at 11:30hrs, that the weather cleared sufficiently enough. The two jets performed three bombing runs, and then a strafing run too, before returning safely to Piura at 13:07. Hard on their heels was the section composed of Major Klatic (in A-37B serial FAP 124), and 2nd Lieutenant Hundskoff (in FAP 149), which launched from Piura at 11:33hrs. They reached PV-3 at 12:23hrs to unleash the content of their LAU-3A/B pods and additional CBU-26s. As far as the two pilots were able to gauge, all of these hit their mark.⁸

Second Contact

Immediately after, units of GA.3 joined the action. At 13:35hrs, Mi-8T serial number FAP 841 rocketed PV-22. This was followed by additional helicopters, one of which returned to Comainas with three bullet holes in its main rotor. This action not only illustrated the threat the pilots were facing, but also made it clear that the Ecuadorean ground troops were still full of fight. Therefore, air strikes continued. At 16:15hrs, Major Klatic (in A-37B serial number FAP 124) and 2nd Lieutenant Hundskoff (on FAP 149) launched from Piura to attack PV-22. At the time the two jets reached the combat zone, around 16:33hrs, the objective was covered by mist and thus Klatic and Hundskoff targeted a suspected Ecuadorean position south-east of the main target. The subsequent report by the FAC concluded that their attack was ineffective. The same was true for the strike by A-37Bs flown by Captain Maldonado and Lieutenant Orihuela, ten minutes later: by that time the mist was so dense that the pilots could not even locate either PV No. 3 or No. 22.

In the meantime, transport aircraft and helicopters remained busy – as were Mirages, which all the time flew CAPs over the combat zone. EA.841 deployed its Lockheed L-100 serial number FAP 394 to haul 62,700kg (138,230lbs) of ammunition and supplies from Lima, La Joya, and Talara to Iquitos. The DHC-5 serial number FAP 347 of EA.842 transported 5,000kg (11,023lbs) of supplies for Peruvian Navy units in Tumbes, while transports of EA.843 spent the day ferrying personnel, and hauling ammunition, fuel and other supplies to the operational zone. For example, the An-26 serial number 363 left Iquitos for Ciro Alegria with 4,343kg (9,575lbs) of supplies, at 05:40hrs, while another Antonov followed shortly later, carrying 8,207kg (18,093lbs) of food and ammunition. A third An-26, serial number FAP 387, was diverted to Iquitos due to bad weather. At 15:00hrs a pair of Mirage M5P3s on a CAP over the combat zone detected three Ecuadorean helicopters underway at top speed towards PV-22. The Mirages promptly requested permission to attack, but by the time this was granted, the Ecuadoreans had returned to their side of the border.

30 January 1981: Sukhois over Ecuador

Early on 30 January 1981, all the training centres of the FAP were closed, and the Double Function Assignment Plan (*Doble Asignación de Funciones*) activated, under which all personnel assigned to administrative and other, 'secondary' duties were to report to the HQ, which was to re-distribute them to operational units. Moreover, all brigade commands assigned to the NOT were assigned to prepare detailed emergency plans for nocturnal strikes on major targets in Ecuador – foremost air bases, power plants, and refineries. As a result, the command of GA.11 developed a plan for a 12-aircraft strike by Su-22s and a similar number of Mirages from EA.611, which were to be preceded by a 'pathfinder' armed with FOTAB-100 illuminating bombs. However, all such plans experienced a major problem: the FAP was extremely short on the latest intelligence on the location and composition of the Ecuadorean air force. Indeed, most of the intelligence available to the HQ of GA.11 was 10-15 years old, while an update from the Intelligence Directorate FAP indicated that most of the FAE's frontline assets had been withdrawn to Mariscal Sucre AB, outside Quito. Considering this airfield was constructed at 3,800 metres above sea level, this would have rendered types like the Jaguar, Mirage F.1 and A-37B unable to operate with their usual warloads: unsurprisingly, the Peruvian pilots concluded this information inaccurate, to put it mildly. Eventually, Colonel Luzza felt left without a choice but to order a reconnaissance mission deep inside Ecuador, in order to acquire the necessary information.

For this purpose, the ground personnel of GA.11 prepared three Su-

22s, each armed with two NR-30 internal cannons and a pair of R-3S missiles and carrying one KKR-1 reconnaissance pod and a pair of 820-litre drop tanks. Three experienced pilots were selected for the mission, with the following objectives:

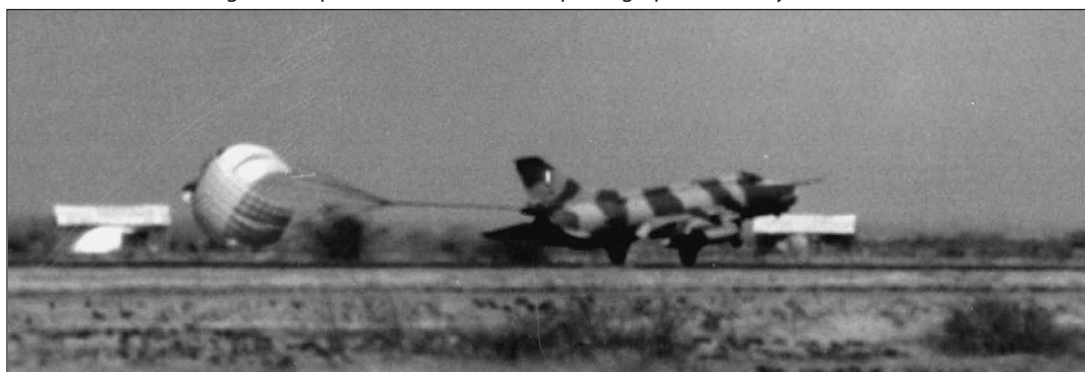
- Commander Jorge Valencia MacKee: Mariscal Sucre AB and Latacunga AB
- Major Carlos Palacios Rossi: Manta AB and Ulpiano Paez AB (Salinas)
- Major Carlos Portillo Vasquez: Taura AB

In each case, the pilot was to make a direct overflight to take photographs, but also to use the ELINT-section of his KKR-1 pod and record the positions and any kind of emissions from the Ecuadorean air defence systems and also those emitted by FAE combat aircraft. In their support, two pairs of Su-22s armed with R-3S missiles only, were to orbit above Puna Island.

The trio of Su-22s equipped for reconnaissance launched at 04:50hrs from Talara AB and proceeded towards their targets in complete radio silence. Underway at critically low altitudes deep between the mountains that mark the border between the two nations, they reached their objectives with the first light of the day – and entirely unmolested. Indeed, taking the Ecuadoreans completely by surprise, all three took their photographs successfully and fully completed their assignments without being intercepted by the FAE's Mirages. Once on the ground, the photographic film from their KKR-1 pods was promptly extracted by the ground crews and developed at the special mobile film-developing station. The results were revealing: the FAE had concentrated most of its aircraft at Taura – 25 minutes of flying time from Talara AB – where these were dispersed and camouflaged around the base. Immediately after, Luzza called the Head of the COMOP, Major-General Carlos



An Su-22 "Fitter F" displays its deadly cargo during a ceremony held at El Pato AB, home of GA N°11, after the end of the operations over the Condor mountain range. Notable is the large KKR-1 pod in the centre of the photograph. (Photo by Carlos Portillo)



An Su-22 from EA 111 lands at El Pato AB after returning from an attack mission over the Condor mountain range. (Photo by Carlos Portillo)



Lieutenant Roberto Ruiz poses for the cameraman from the cockpit of a Dassault-Breguet Aviation Mirage 5P3 prior to the beginning of a mission over the Condor mountain range. Note the aircraft is armed in the typical configuration used by the Dardos of EA 612 during the conflict, a pair of Vympel R-3S air-to-air missiles and two 1,700L fuel tanks. (Photo by Roberto Ruiz)

Boluarte Guevara, to send an A-37B from GA.7 to collect the images: unsurprisingly, this was promptly accepted.⁹



Pilots that took part in operations over the Condor mountain range seen in front of one of the Mirage 5P3s from their unit. (Photo by Roberto Ruiz)

Assault on PV-22

Elsewhere, until the dawn of 30 January 1981, it appeared as if the operations over the combat zone would continue as on the day before. This was soon to change as – following the setbacks experienced by Peruvian troops during the first attempt to expulse the Ecuadoreans – the Chief-of-Staff EP decided to replace General Salhuana with Brigadier-General Jorge Montesinos Mendoza as the head of 5.RM. The latter arrived in Comainas early in the morning, with the authorisation to recover PV-22 ‘within 48 hours’. Correspondingly, all available units were ordered to promptly start their preparations for an assault that was to take place at 12:00hrs. At 09:20hrs, the crews of GA.3 and the EP held a meeting with General Montesinos Mendoza and Colonel Muñiz to discuss various options for the assault. After much deliberation, the decision was taken to fly to the target in a formation that would be led by one Bell 212 that would act as airborne command post, followed by two additional Bell 212s and a Mi-8T armed with unguided rockets and machine guns. The latter were to work in conjunction with a pair of A-37Bs from EA.712, and ordered to take out the primary target: an M45 Quadmount – essentially a turret with four .50-calibre (12.7mm) M2 Browning machine guns on a cruciform platform – which dominated PV-22: this was a major threat for everybody involved, and everything depended on it being knocked out. The Dragonflies were to attack with bombs, while the Bells and Mi-8Ts were to use unguided rockets. Once the Quadmount was out of action, two additional Mi-8Ts would deploy assault troops directly atop of it.

Following hurried preparations, the assault formation launched from Comainas with a delay, at 13:00hrs. Underway in a staggered formation and covered by three Mirage M5P3s from EA.612, the helicopters followed the Comainas River. Only five minutes later,

the crew sighted the target and Eberman issued the order to open fire. The two A-37Bs dropped their bombs with excellent precision. Captain Angeles then approached with his Mi-8T to unleash a salvo of 61 S-5M unguided rockets. He was followed by Lieutenant Sanjine with the Bell 212, who deployed his 2.75in unguided rockets. Each of the three gunships flew two attack runs, by the end of which the Ecuadoreans ceased firing back. Captain Angeles then came in to deploy a section of troops under the command of Captain Marco Yañes. Captain Davila landed immediately after: by the time

the Mi-8T serial number 677 touched down, the landing zone was subjected to fire of growing intensity from the surrounding jungle, and the pilot thus remained on the ground for several minutes, to pick up the first casualties. That said, the Ecuadoreans were not only taken by surprise but, under the weight of the Peruvian assault, forced to flee, leaving most of their equipment and much of their armament behind: by 13:25hrs, the Peruvian flag was firmly flying over the outpost. The three wounded Peruvian troops were then flown out to Comainas on board Dávila’s Mi-8T: the only two Ecuadorean casualties found – Nicanor Quiroz Salazar and Manuel de Jesus Martinez – were buried in place. They were the operators of the M45 Quadmount and seem to have been killed early during the assault by shrapnel from bombs dropped by the Dragonflies of EA.712. Immediately afterwards, all the helicopters returned to Comainas to pick up reinforcements, ammunition and supplies. It was after one such flight that the EP Mi-8T serial number 561 overturned on landing at the PV-22, killing an infantryman that jumped out of it.¹⁰

Once again, the operation was ably supported by Mirage interceptors and transport aircraft. The An-26 serial number 387 brought fuel and supplies for helicopters to Ciro Algeria FOB, early in the morning; another aircraft of this type, serial number 376, then flew in 4,140kg (9,127lbs) of additional fuel and water. Other Antonovs (including serial numbers 366, 386, 388, 391, and 392) transported supplies from Lima to Talara, Piura and Chiclayo. A DHC-5 serial number 351 then hauled the same equipment and supplies from Chiclayo to Ciro Alegria and Bagua FOBs.

Mirages of EA.612 maintained constant CAPs over the combat zone during the day, but except for the sighting two Ecuadoreans saw no enemy. At 18:50hrs, one of the interceptors flying top cover for another of the Learjet reconnaissance sorties, experienced a failure

of its INS and several other systems, and then nearly ran out of fuel: the aircraft took the barrier at the end of the runway of Chiclayo. The pilot survived without injuries, while the aircraft sustained minor structural damage that was quickly repaired.

The Ecuadorean reaction was rather restrained. A pair of

Table 13: Combined EP/FAP Assault Force for VP No. 22, 30 January 1981			
Service	Type	Serial	Notes
FAP	Bell 212	FAP 602	Pilot Captain Eberman; airborne command post
FAP	Bell 212	FAP 605	Lieutenant Vargas; equipped as gunship
FAP	Bell 212	FAP 688	Lieutenant Sanjines; equipped as gunship
EP	Mi-8T	EP 561	Captain Angeles; deploying 17 troops
FAP	Mi-8T	FAP 677	Captain Jorge Dávila and Lieutenant Carlos Samamé; deploying 17 troops
EP	Mi-8T	EP 535	Crew unknown; deploying 17 troops

A-37Bs of the FAE did appear over the combat zone, around 14:00hrs, but hurriedly withdrew after sighting two high-flying Mirage M5P3s. The Assault on PV-22 was thus concluded with complete success: at the cost of one killed and three injured, the Peruvian forces quickly secured the outpost: the Ecuadoreans not only lost the position and two killed, but – based on radio-intercepts by the Peruvian intelligence – suffered additional casualties. Moreover, their troops deployed in the area were scattered, short on arms and ammunition and in no position to attempt returning.

That said, the High Command in Quito did launch an attempt to support its troops at PV-22, even if quite late. A single SA.330 Puma of Rescue Group 221 (*Grupo de Rescate*, GR) – serial number AE-456 – was dispatched towards the combat zone, carrying supplies and additional troops, shortly after 17:00hrs. At 17:30hrs, a pair of Mirage F1EJs, each armed with a pair of Matra Type-155 SNEB pods for unguided rockets and a pair of wing-tip mounted Matra R.550 air-to-air guided missiles, were dispatched to provide top cover and close air support, as necessary. However, once inside the Peruvian airspace, the Mirage flown by Colonel William 'Apache' Birkett Mórtoles came under attack by one SA-7 MANPAD, which forced him to take evasive action and descend to minimal altitude. Concluding they had been detected early, the Ecuadoreans then withdrew without trying to fire back.

31 January 1981

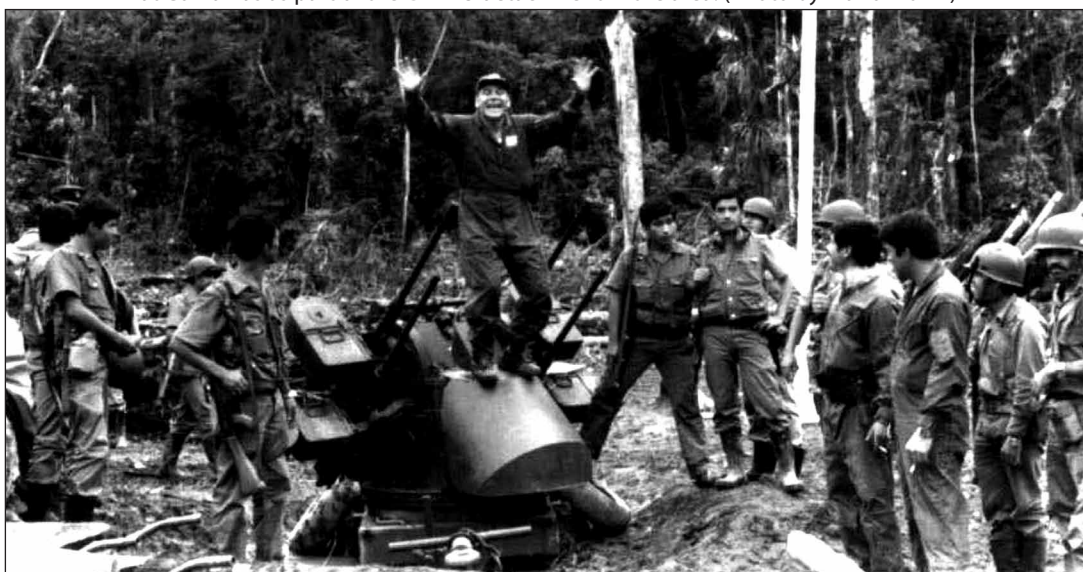
At 00:10hrs on 31 January 1981, a Learjet carrying Colonel José Nadal landed at Talara AB carrying a new set of orders for GA.11: based on intelligence collected during the reconnaissance sorties a day before, these included plans for major air strikes on Ecuadorean air bases. However, no order



Armorers replenish the tubes of the M260 rocket launchers fitted to this Bell 212 from EA 332 at Comainas. (Photo by Carlos Samamé)



Peruvian Army troops and FAP armorers posing next to a Bell 212 from EA 332 deployed at Comainas as part of the GA N°3 detachment in the area. (Photo by Mario Muñiz)



Colonel Mario Muñiz Ortega, commander of GA N°3, jumps on top of the M45 Quadmount gun placement captured at PV-22/'Falso Paquisha'. (Photo by Mario Muñiz)



A view of PV-22 after capture. Note the Mi-8T flown by Captain Davila parked on the left. (Photo by Mario Muñiz)

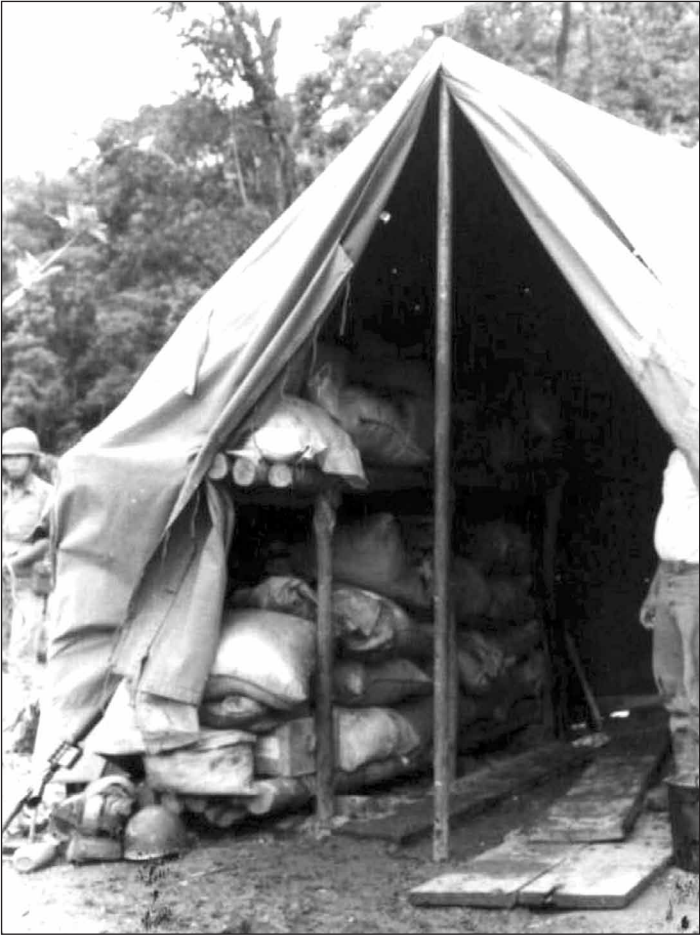
to actually fly such missions were ever issued. Indeed, the day saw a sharp decrease in the tempo of Peruvian operations: obviously, the withdrawal of the Ecuadoreans from PV-22 left them without targets. Certainly enough, the Ecuadoreans were still in possession of PV-3, and Brigadier-General Montesinos Mendoza was also eager to recover the site: at 09:30hrs, an Mi-8T of the EP, flown by Lieutenant Cortadillo, departed from Comainas to assault PV-3 with unguided rockets and land a platoon of 15 troops. However, it encountered strong enemy fire and was forced to withdraw early. Montesinos Mendoza promptly ordered a second attempt supported by all available forces. The result was a plan for an operation that was even more comprehensive than the assault on PV-22, a day earlier, as obvious from the list of the aircraft and helicopters involved as shown in Table 14.

Of course, such an operation took its time to prepare. Moreover, the FAP was then distracted when, at 12:00hrs, a helicopter carrying President Belaunde Terry, several other members of the government, and several representatives of the international press, landed at PV-22: the vulnerable helicopter had to be protected by a pair of Mirage M5P3s of EA.612. Once on the ground, Belaunde presented evidence of Ecuadorean infiltration, together with their flags, military equipment, clothing, and captured weapons. After touring the site, and then congratulating and encouraging Peruvian troops and aviators around him, Belaunde Terry embarked the same helicopter and, escorted by the ‘Dardos’ from EA.612, flew back to Comainas at 13:00hrs.

With the top Peruvian politician out the way, the assault on PV-3 could finally start. At 13:20hrs, a pair of Su-22s from EA.111 saturated the Ecuadorean position with a total of 20 FAB-100M54 bombs. The assault force was about to get ready when, slightly over half an hour later, the P-14 radar at Talara detected the appearance of a single, fast-moving Ecuadorean jet inside Peruvian airspace: at 14:10hrs, a Jaguar of the FAE passed above PV-22.

Of course, the site was already occupied by Peruvian troops and their SA-7-team fired at least one missile at the intruder, but without success, and it seems, the Mirages that flew the CAP were unable to intercept the low flying Ecuadorean jet either.

This interruption in turn bought time for the transport-crews of GA.8 to become involved in a particularly



Photographs showing some of the equipment and supplies captured from Ecuadorean forces at PV-22 (or ‘Falso Paquisha’). (Photo by Mario Muñiz)

Table 14: Combined EP/FAP Assault Force for VP No. 3, 31 January 1981			
Service	Type	Serial	Notes
FAP	Su-22	FAP 023 and FAP 028	Strike
FAP	Mirage M5P3	FAP 112 and FAP 183	CAP
FAP	An-26	FAP 379	Captain Caceda; strike
FAP	Bell 212	FAP 602	Captain Eberman; airborne command post
FAP	Bell 212	FAP 688	Captain Sanjines; CAS and assault
FAP	Bell 212	FAP 605	Lieutenant Vargas; CAS and assault
FAP	Mi-8T	FAP 677	Captain Dávila, CAS and assault
EP	Mi-8T	EP 511, EP 534, EP 537, and EP 541	Assault



Personnel from GA N°3 and the Peruvian Army at PV-22 after its capture. (Photo by Mario Muñiz)

spectacular fashion. At 16:40hrs, the Ecuadoreans at PV-3 came under attack by an An-26 serial number FAP 379, flown by Captain Guillermo Caceda. The lumbering transport came down quite low and slow for its loadmaster to roll out over the rear ramp six fuel drums with explosives attached. These were not only deployed with surprising precision but seem to have left a lasting impression upon the Ecuadoreans on the ground: immediately after, Peruvian intelligence intercepted a radio communication in which the enemy reported an air strike by 'Canberra bombers'. Unsurprisingly, when, at 17:45hrs, Captain Eberman in Bell 212 serial number FAP 602 led the assault at PV-3, and the helicopter gunships unleashed their now usual barrage of unguided rockets before deploying the 54 troops led by 2nd Lieutenant Robles, the Ecuadorean troops there withdrew in a great rush. Hard on the heels of the Falso Paquisha, Falso Machinaza was thus quickly secured for Peru, and that without any casualties at all.

Meanwhile, at 16:55hrs, A-37Bs serial numbers FAP 136 and FAP 149 launched from Piura, each armed with four Mk.82s and two napalm tanks, to strike PV-3. However, after only 20 minutes of flight, their pilots were informed that the target had been secured, and that President Belaunde Terry had called off all further offensive operations by the FAP. The two disappointed pilots thus returned to Piura at 17:25, ending the last combat sorties of the EA.712 in this short but intense conflict.

Belaunde Terry's order had an even more important repercussion for the crews of GA.6 and GA.11. Namely, in the light of the orders that their HQs had received early that day, EA.111 and EA.611 – both of which had been kept in reserve until this very moment – began preparing for a major air strike on the Ecuadorean air bases. Correspondingly, about a dozen Mirage M5Ps in Chiclayo were



An aerial view of PV-22/"Falso Paquisha" shortly after its capture by Peruvian forces. A Bell 212 and an Mi-8T from GA N°3 can be seen stationed on the small helipad of this position. (Photo by Mario Muñiz)



Peruvian President Fernando Belaunde Terry is briefed about the characteristics of the M45 Quad gun captured by Peruvian forces in PV-22/"Falso Paquisha". This gun placement was airlifted to this location by an SA-316 Lama helicopter and was knocked out during the early hours of 28 January by the rockets fired by attacking Cessna A-37Bs from EA 712. Two of the weapon's three operators were also killed during the attack. (Photo by Mario Muñiz)



Weapons, supplies, communication and construction equipment were part of the items left behind by retreating Ecuadorian forces at PV-22. (Photo by Mario Muñiz)



Members of EA 612 portrayed in front of one of the "Dardos" assigned to the unit. From left to right: Lieutenants Milenko Vojvodic, Roberto Ruiz, Oscar Muñoz, Pedro Seabra and Luis Viale. Lieutenant Viale, while not flying combat missions aboard the Mirages, acted as Forward Air Controller for the units involved in the operations. (Photo by Roberto Ruiz)

armed with Matra JL.100 combined rocket pods and drop tanks, and RPK-10 tanks/bomb carrier pods with four Mk.82s each; similarly, a dozen Su-22s at Talara had been armed with FAB-500M-62 bombs. After being briefed to strike Taura AB, Eloy Alfaro AB outside Manta, Ulpiano Paez AB outside Salinas, Simon Bolivar AB outside Guayaquil, Mariscal Sucre AB in Quito, and – as secondary objective – Latacunga AB, the pilots took their places inside their cockpits and entered their final preparations for take-off. Just in that very moment, Belaunde Terry not only repeated his order for an end to offensive operations but issued an explicit order for GA.6 and GA.11 not to

Mirages from the EA.612 were to provide top cover for the helicopters involved, the composition of which was as provided in the Table 15.

Necessary preparations were completed by 13:30hrs: the formation approached the target zone and subjected it to multiple volleys of rocket fire, then returned to Comainas to refuel and rearm. At 15:00hrs the weather over PV-4 worsened, forcing not only a suspension of the assault, but also the Mirage CAP to return to Chiclayo. Nevertheless, preparations for the attack went on and the helicopters launched again at 17:00hrs. Thirty-eight minutes later, the formation deployed troops in a ravine near PV-4. Gusy was the first to land, followed by Sajino

take any further action. With hindsight, the conclusion is that this was the very moment many within the FAP decided that their 'pacifist' president would have to pay the price, some day.

1 February 1981

Even if the offensive operations of the FAP had been stopped, those of support aircraft and helicopters went on. On 1 February, the L-100 serial number FAP 384 ferried 15,900kg (35,053lbs) of equipment and supplies for the FAP's Special Forces Group (Grupo de Fuerzas Especiales, GRUFE), from Lima to Talara, and then, in another flight, to Piura and La Joya. Finally, during the evening this aircraft flew a supply mission to the area of operations, logging a total flight time of 4.6 hours.

Meanwhile, General Montesinos Mendoza ordered Lieutenant-Colonel Juilo Brun to recover PV-4 (or "Falso Mayaicu"). With most of his combat troops preoccupied with securing PV-22 and PV-3, he had to assemble an assault force consisting of officers and auxiliary personnel. The plan for this attack essentially followed the patterns set up during the last two days but had to be undertaken without any support from the FAP's fighter-bombers:

and then Willy: each helicopter disgorged ten troops. By the time the latter had reached PV-4, the Ecuadoreans offered only token resistance and then disengaged into the jungle. By 18:26hrs, PV-4 was secured and the Peruvian flag raised. Meanwhile, the helicopters returned to Comainas to rearm and pick up additional troops: the operation was completed

Table 15: Combined EP/FAP Assault Force for PV-4, 1 February 1981

Service	Type	Serial	Notes
EP	Mi-8T	EP 541	Formation Leader, call-sign Zancudo
FAP	Mi-8T	FAP 677	Number 2, flown by Captain Davila, call-sign Dick Tracy
EP	Mi-8T	EP 537	Number 3, call-sign Tramboyo
FAP	Bell 212	FAP 602	Number 4, Captain Eberman, call-sign Gusy
EP	Mi-8T	EP 502	Number 5, Captain Graham, call-sign Cuchilo
FAP	Bell 212	FAP 605	Number 6, Captain Sanjines, call-sign Sajino
FAP	Bell 212	FAP 688	Number 7, Captain Vargas, call-sign Willy



EP troops next to a FAP Bell 212 in Comainas shortly before the beginning of the operation for the capture of PV-3. (Photo by Mario Muñiz)



A gunner from EA 332, holding an FN MAG machinegun, seen next to this heavily armed Bell 212 from EA 322 shortly before the beginning of the operations for the recapture of PV-3. (Photo by Mario Muñiz)

with the deployment of these troops around 20:00hrs. With this, the FAP's involvement in *Operación Rechazo* came to a temporary end.

Of course, in the rear of the combat zone, ALAR.2's units continued performing support missions for the NOT. During the morning, DHC-5 serial number 326 ferried additional troops of GRUFE from Lima to Chiclayo, while Buffalo serial number FAP 303 delivered a 'special cargo' of unknown nature to GA.6.

2 February 1981

If the reaction of the Ecuadorean Air Force to *Operación Rechazo* remained more than restrained over the previous few days, nothing similar can be said for the morning of 2 February 1981. At 05:00hrs, the command of EC.2111 at Taura AB received an order to fly an air strike against the Teniente Pinglo base of the EP. For this purpose, the CO of the unit ordered his ground crews to arm four Jaguars with general-purpose bombs and BL.755 CBU's. Meanwhile, he picked Lieutenant-Colonel Alberto Naranjo Franco, Captain Eduardo Garzón Triviño, Captain César Naranjo Anda and Captain Humberto Andrade to fly the mission and assigned them the task

of operational planning. Following hurried preparations, the pilots embarked their aircraft and, at 06:30hrs, exactly as planned, rolled for take-off. It was just at that moment that an urgent message reached the HQ of Taura AB: Ecuador's President Jaime Roldós Aguilera had called off this attack and the mission was aborted.

Oblivious to this threat, the FAP continued its operations on the morning of 2 February as planned. At 06:00hrs, helicopters deployed the communication equipment for all the SA-7 teams to PV-3, PV-4 and PV-22, thus essentially creating an integrated air defence system over the combat zone. At 09:00hrs, the Mi-8T serial number 677 flown by Captain Davila took off from Ciro Alegría for Comainas carrying six fuel drums with Turbo A-1 helicopter fuel. Arriving over Italia, this officer received orders to escort Bell 212 serial FAP 688 carrying reinforcement troops to PV-4 since the commander of Peruvian forces stationed there reported the continuous activity of Ecuadorian helicopters over a small landing zone in the forest at less than two kilometres away and feared that these aircraft had been ferrying troops. With news of these events and with its helicopters committed to other sectors, the EP requested support from the commander of GA.3, and for his helicopters to bring in additional troops from Comainas to PV-4. Both helicopters completed two such flights by noon, when on the flight back to Comainas, Captain Davila noticed a 'Gazelle helicopter' behind him. The helicopter in question started to pursue him, forcing the pilot into evasive action at tree top altitude all the way back to Italia.

Meanwhile, at 09:28hrs, the P-14 radar in Talara detected a pair of Mirage F.1EJs approaching the border at an altitude of 5,000 metres (10,193ft), and speed of 1,050km/h (652 miles per hour). About 10 kilometres from the frontier in the Tumbes sector, the two jets turned away and the contact to them was lost around 09:41hrs. Once the resulting tensions lessened, a Learjet flew another reconnaissance mission over all of the recaptured outposts, taking photographs that were to be used by the Guarantors' Commission, members of which were already expected in Peru. Finally, the L-100 serial number 384 transported a single SNECMA Atar 09C engine that was overhauled at SEMAN from Las Palmas to Chiclayo. On the next morning, the same aircraft also hauled 9,225 litres (2,436 US gallons) of fuel and other supplies to Piura.

3 February 1981

In Peru the capture of PV-4 – which was considered to be the last of the compromised border posts inside its territory – was understood to be the end of the military operations. Thus, not only the armed forces, but the politicians in Lima had experienced quite a rude awakening on the morning of 3 February, when reconnaissance photographs from the previous day showed three additional positions occupied by Ecuadorean forces on Peruvian territory. These were positioned in the valley of the Comainas and Cénepa Rivers, and designated Jiménez Banda 2 (PV El Mirador), PV-4A (northeast of the recovered PV-4), and PV-4B or PV-4 Viejo (Old, because it was constructed atop an old

EP post vacated in the late 1970s). Unsurprisingly, this prompted the government of President Belaunde Terry into the decision to continue military operations until all the infiltrators were expelled. Even so, there was no immediate action by the armed forces: on the contrary, the only registered flights taking place over the following 48 hours were undertaken on 3 February, when the FAP DHC-5 serial number FAP 351 ferried personnel and supplies from Piura to Talara, before heading to Chiclayo and then to Lima. The Buffalo serial number 328 meanwhile transported supplies and personnel from Iquitos to Ciro Alegría and El Valor, before returning to Iquitos in the evening.

6

AERIAL OPERATIONS FROM 18 TO 20 FEBRUARY 1981

Following weeks of diplomatic negotiations sponsored by Argentina, Brazil, Chile and the United States (guarantors from the 1942 peace agreement) – with full backing of the Organisation of American States (OAS) – a cease-fire agreement was reached on 5 February 1981. However, since the Ecuadorean troops deployed at the three newly discovered outposts showed no signs of intention to withdraw, at least in Peru it was promptly clear that this cease-fire was entirely pointless. Therefore, COMOP began preparing its forces for the second round of the conflict.

18 February 1981

The operations to recover the newly discovered positions began on 18 February 1981, at 15:30hrs, with the arrival of a pair of Mi-6As with 120 troops from BIS.25 at the Jiménez Banda FOB. Amongst those on board was General Salhuana MacKee, who was to command this operation. During a conference with local commanders set up immediately after, the decision was taken to first assault PV Jiménez Banda 2 – also known as the Falso Machinaza – as reconnaissance indicated that this outpost was the weakest defended.¹ Jiménez Banda 2 was located in a ravine on the Cénepa River, in front of the real Machinaza, and was generally similar to PV-4 Nuevo, although larger. According to the intelligence collected by the EP and the FAP during the first half of February, it was defended by at least 60 Ecuadorean troops with much more – and heavier – weaponry than those encountered during earlier operations.

Salhuana MacKee's plan for the assault on the Falso Machinaza contemplated the use six Mi-8T helicopters operating in two groups: the first was to consist of four gunships, which were to soften the target zone with their onboard weapons, and then land assault troops. The other two would 'only' transport troops. Details of the Mi-8s involved are listed in Table 16.

19 February 1981

The assault on PV Jiménez Banda 2 began at 06:40hrs of 19 February 1981. Their assault began with the Mi-8T serial number EP 534 firing its S-5M rockets upon the target, only to receive quite precise ground fire in return. The pilot reacted by making evasive manoeuvres, in turn making place for the Mi-8T serial number EP 576: however, Major Polanco could not see the enemy and thus did not open fire. Because it was obvious that the Ecuadoreans were alerted and expecting an attack, the entire formation turned away: in the course of a quick radio-conference, the decision was taken to land the troops on the bank of

the Cénepa River, about 400 metres away from the target. Once on the ground, the first platoon of 15 troops then assaulted with support of its machine guns and grenades but encountered no opposition. Immediately afterwards, they were reinforced by those disgorged from the other helicopters. Jimenez Banda 2/'Falso Machinaza' was safely under Peruvian control by 07:15hrs, and the assaulting troops captured a second M45 Quadmount, a significant amount of small arms, ammunition, equipment, and emblems.

By 14:00hrs, General Salhuana MacKee was reviewing the just captured Jiménez Banda 2 PV when the Ecuadoreans suddenly launched a counterattack. This, however, was weak and became quickly repelled by the Peruvians, apparently without casualties on either side.

Table 16: EP Assault Force for PV Jiménez Banda 2, 18 February 1981		
Type	Serial	Notes
Mi-8T	EP 534	Formation Leader; Captain Luque, call-sign Zancudo
Mi-8T	EP 576	Number 2; Major Polanco, call-sign Tramboyo
Mi-8T	EP 504	Number 3; Captain Graham, call-sign Cuchillo
Mi-8T	EP 519	Number 4; Major Noriega
Mi-8T	EP 511	Number 5; Captain Vergara
Mi-8T	EP 567	Captain Balarezo

20 February 1981

Early on 20 February 1981, General Salhuana MacKee ordered the attack on PV-4 (or 'Falso Mayaicu'). For this purpose, he deployed two platoons – about 30 troops in total – commanded by Captain Luis Chavez Agusti, starting at 06:00hrs. After a four-hour-long march through dense jungle and rugged terrain, the troops attacked supported by the fire from several machine guns, mortars, and RPG-7s (the latter were captured by the Ecuadoreans), at 10:00hrs. However, they encountered heavy machine gun fire from several positions covering the approach routes and were pinned to the ground. At this point in time, multiple EP Mi-8Ts – which were returning base from an air strike against PV-4B – joined the fray and attacked the Ecuadoreans with their remaining rockets. Their fire support prompted the Ecuadoreans to withdraw, and the Peruvians then quickly overran 'PV-4 Nuevo', capturing one MAG machinegun,



Two views of PV-4 ('Falso Mayaicu') before and after capture by Peruvian forces. (Photos by Mario Muñiz)

18 sleeping bags, 6 Ecuadorean Army backpacks, commando daggers, several mortars and a stock of supplies.

Table 17: EP Assault Force for PV-4B, 20 February 1981

Type	Serial	Notes
Mi-8T	EP 576	Formation Leader; Major Polanco, call-sign Tramboyo
Mi-8T	EP 504	Number 2; Captain Graham, call-sign Cuchillo
Mi-8T	EP 511	Number 3; Captain Vergara
Mi-8T	EP 534	Number 4; Captain Lague, call-sign Zancundo

Meanwhile, the plan for a – much more comprehensive – assault on PV-4B had been approved by EP commanders at Chavez Valdivia. Correspondingly, four Mi-8Ts were to become involved, as listed in Table 17. After taking-off at 09:45hrs, the helicopters reached the target at 10:00hrs, only to find it covered by mist. Thus, a decision was taken to fly over and around it and identify potential aiming points. The assault thus began at 10:15hrs, with a series of air strikes by Mi-8T serial number EP 576, flown by Major Polanco. The Ecuadoreans returned fire – and very precisely at that: the helicopter's cockpit was sprayed by machinegun bullets, which severely wounded Polanco and fatally wounded his co-pilot Lieutenant Julio Ponce Antúñez de Mayolo. Polanco remained calm and crash-landed his Mi-8 – which



Colonel Mario Muñiz shakes the hand of the commander of EA 332 amid a review of the unit elements at Ciro Alegria EP base shortly after the culmination of the military operations in the area in February 1981. (Photo by Mario Muñiz)



Peruvian President Fernando Belaunde Terry shakes hands with the officers from GA N°7 that took part in the operations over the Cóndor mountain range. (Photo by Marco Seabra)



Officers of EA.332 at GA.3's home-base in Callao shortly after the end of hostilities. (Author's collection)

was carrying 18 fully armed troops – into the riverbed. Seeing this scene, Captain José Graham Ayllón attacked with his machineguns and unguided rockets, providing cover for the downed crew and its passengers: moreover, he rushed straight to PV-4B and deployed all the 18 troops carried by his helicopter, which then quickly secured the outpost.

Nearly all the troops aboard the downed Mi-8T were badly wounded. Nevertheless, they quickly recovered from the shock, grabbed their firearms and jumped out, establishing a perimeter around the helicopter. Only minutes later, they fought back a group of Ecuadorean troops that approached the crash site.

From the Peruvian point of view, the situation was now uncertain:

they had recovered PV-4B but had no radio contact to the downed Mi-8T or the troops it carried. Moreover, although the Ecuadoreans withdrew into the nearby jungle, they were most likely still a threat for everybody involved. Therefore, back at Chavez Valdivia, a rescue operation was quickly set up by General Salhuana: this envisaged three Mi-8Ts, accompanied by two – more manoeuvrable – Bell 212s of GA.3, to attack PV-4B again. Captain Graham was to fly reconnaissance ahead of the formation in order to find the EP 576 crash site and to make sure there would be no friendly fire incidents.

7

AFTERMATH

On 22 February 1981, the Peruvian National Defence Council agreed to let the Minister of Foreign Affairs inform the Guarantors that Perú was ready for serious peace-talks, as soon as they had verified that all Ecuadorean troops had vacated Peruvian territory. The Guarantors' Commission had verified that the last infiltrators left the area by 12:00hrs of 25 February 1981, and with this the peace talks – finally – began in earnest. By this time, the High Command of the Ecuadorean Armed Forces had rushed 75,000 troops under the command of General Richelieu Artieda Levoyer – known to the Peruvians as the 'hard liner' in regards of the dispute – to the border. It was argued that setting up a heavy, multi-barrel machine gun on an outpost well inside Peru – as the Ecuadoreans did at PV-22 and at Jiménez Banda 2 – was not only a major violation of earlier agreements, but also a symbol of the seriousness of the premeditated Ecuadorean aggression. According to the Peruvian military, the deployment of significant military equipment to that area was only a demonstration of the high strategic value that PV-22/Falso Paquisha and 'Jimenez Banda 2' posts had for the Ecuadorians. Such conclusions were confirmed by the capture of documentation which indicated that the Ecuadorean operation had been planned since 1977, and the subsequent revelation that President Jaime Roldós Aguilera originally planned to 'officially inaugurate' the posts that were on Peruvian territory on 12 February to show the world that this territory was "Ecuadorian soil".¹

Nevertheless, due to very smart negotiation tactics, Roldós Aguilera and the Ecuadorean Generals avoided taking responsibility for the short war, the death of three officers of the Peruvian armed forces and the damage caused. Instead, the Sorrosa-Du Bois Act, a sort of 'gentlemen's agreement' mediated by the OAE was reached, under which both sides withdrew their armed forces from the border, and especially the Condor mountain range.

Rather tragically, no agreement was reached to complete the demarcation of the border, and fire fights were soon a daily occurrence once again, especially during the month of January – the anniversary of the signature of the Rio Protocol. Indeed, after conducting a national opinion survey that reportedly confirmed the

The formation launched at 15:45hrs and reached the combat zone at 16:00hrs, flying only metres above the treetops. Once above PV-4B, Graham quickly realised that the outpost was already secured by the troops he had deployed earlier, and thus an air strike was recalled: instead, the helicopters then deployed the troops that they carried, and then returned to Chavez Valdivia to pick up reinforcements and supplies. With this action the last of the outposts illegally constructed by the Ecuadorians on Peruvian soil was recovered.

popularity of nullification of the Rio Protocol, in 1983 the National Congress of Ecuador reaffirmed its position on the nullity of that agreement.²



Members from the Commission of Guarantor Country's representatives observe the terrain through the window of a DCH-5D during a reconnaissance flight over the Condor mountain range on 3 February 1981. (Photo by Mario Muñiz)

At least as tragic was the fact that the last blood spilled in this conflict was not spilled by either of the two contestants: on 17 February 1981, a Bell UH-1D helicopter of the US Army crashed in the Yangana region, on the border between Ecuador and Peru, while underway in support of the Guarantors' Commission. The wreck of



Crews from EA 611 and EA 612 of GA N°6 seen in front of a pair of Mirages parked on the tarmac of Teniente Coronel Pedro Ruiz Gallo AB in Chiclayo in February 1981. (Author's collection)

the helicopter and the remains of its unfortunate crew and passengers were never found.

Ecuadorean Lessons

The exact extent of the involvement of the Ecuadorean armed forces and the Ecuadorean Air Force in what eventually became known as the Paquisha War, fought in January and February 1981, and the exact number of Ecuadorean casualties, remain unclear until this very day. According to diverse accounts, the FAE may have lost one helicopter machinegunned on the ground, 16 killed and 30 wounded. However, the same sources all stress that the war began with a Peruvian aggression against Ecuador on 22 January 1981, which – on the basis of available evidence – was clearly not the case.³

What is certain is only that General Artieda Levoyer – the Southern Front Commander, and foremost a highly-influential political figure in his country, a former minister of the Ecuadorean government, and subsequently a member of the National Congress – initially deployed 25,000 troops for operations against Peru. Reportedly, there was a plan for an invasion, but instead the troops were deployed to heavily militarise the border zone, construct gravel roads to several outposts and fortify the latter, instead.

Ultimately, and for unclear reasons, the FAE played a minimal role: except for is helicopter-operations in support of infiltrating ground troops, its fighter bombers and other aircraft hardly ever appeared over the combat zone. Part of the reasons for such restraint in operations can be found in subsequent Ecuadorean behaviour. On 21 May 1981, and despite an earlier veto by US Congress, Quito signed a contract for the acquisition of 12 Israel Aircraft Industries (IAI) Kfir C.2 fighter-bombers



On 21 May, 1981 the Ecuadorian government signed a contract with Israel Aircraft Industries for the purchase of 12 IAI Kfir C-2. The contract covered ten single-seaters fighters, a pair of two-seat trainers, support equipment, spare parts, training, weapons, and a flight simulator. The aircraft were delivered to Ecuador during April 1982. (Photo by Jorge Delgado)



A trio of de Havilland-Canada DHC-6 Twin Otters were acquired by the FAE in mid-1975 and assigned to Ecuadorian Military Air Transports, an Ecuadorian state air company. By the end of 1981 two of the three original aircraft had been lost in accidents. The FAE acquired additional copies as replacements, which were assigned to Escuadrón de Transporte 1113, Ala de Transporte 11. (Photo by Jorge Delgado)



Ecuadorian Army Aviation took delivery of at least eight Aérospatiale AS-332 Super Pumas in 1982. These were assigned to Escuadrón de Asalto from Grupo Aéreo N° 44 Pastaza. (Photo by Jorge Delgado)



On 11 October 1982, the Peruvian government and a French consortium composed of SNECMA, Thomson and AMB-BA aviation signed a contract for the procurement of 26 Mirage 2000 fighters – 22 single seat and four two-seater airframes. After a political scandal, FAP eventually took delivery of 12 airframes (ten single seat Mirage 2000P and a pair of Mirage 2000P trainers) on 20 November 1986. Three of these airframes are seen here at Toulon harbour before being loaded onto the French freighter *François Billon*. (DINIA)



In late 1982 a detachment from GA N°7 flew to Cordoba, Argentina, in order to receive training in aerial refuelling with the Fuerza Aérea Argentina Lockheed KC-130. (Photo by Raul Calle)



A newly delivered Sukhoi Su-22M3 at rest on the tarmac of La Joya AB on 24 February 1981. Looking to strengthen its tactical strike capabilities, the Peruvian Air Force ordered 16 Su-22M3 and three Su-22UM-3 two seat trainers. The Su-22M3 “Fitter J” was an export version of the Su-17M3 fitted with the R-29 engine featuring improved avionics and electronics as well as increased fuel tankage over the Su-22 “Fitter F”. These aircraft were to re-equip Escuadrón Aéreo 411 which had been previously flying Cessna A-37Bs. At the time of the conflict the unit was undergoing conversion to the type. (DINIA)

(including ten single and two two-seaters), together with an extensive quantity of support equipment, spare parts, conversion and tactical training for pilots and ground crews. The fact that the first group of officers selected travelled to Israel for a conversion course already on 16

Table 18: FAP Flight Time during the Paquisha War, 1981

Unit	Flight Time
Escuadrón Aero 331	42 hours, 55 minutes
GA.3	425 hours, 40 minutes
GA.6	152 hours, 25 minutes
GA.7	42 hours
GA.8	727 hours
GA.11	78 hours, 11 minutes

July 1981 suggests that the FAE was in a great hurry. As a result of this effort, on 10 March 1982 the High Command of the FAE authorised the establishment of Combat Squadron 2113 (Escuadrón de Combate 2113). The first flight of a Kfir in Ecuador took place only a few days later on 31 March 1982. Kfir C.2 serial number FAE 902 was test-flown by an Israeli pilot following its delivery by ship via the Atlantic Ocean. This flight was followed by the first by an Ecuadorean pilot: this took place on 19 April 1982, with Major Hernán Quiroz in

the cockpit of another single-seater. Thus began the preparations for the ‘next round’. In similar fashion, the Ecuadorean Army launched a major project to expand its helicopter fleet: by 1982, it placed total cumulative orders for 35 Aérospatiale SA.342 Gazelles (in addition to the five available from earlier), some of these armed with French-made HOT anti-tank guided missiles, and eight Aérospatiale AS.332B Super Puma transport helicopters.

That said, in Ecuador of 1981-1982, both of these acquisitions were overshadowed by the sudden and controversial death of President Roldós Aguilera: he was killed in the crash of a Beechcraft Super King Air carrying the president, the First Lady Martha Bucaram, the Minister of Defence Marco Subía Martínez, and their entourage to a military ceremony in honour of those fallen during the Paquisha War, on 24 May 1981. Marred by numerous irregularities, disappearance of crucial documentation, and the armed forces’ refusal to cooperate with civilian authorities, and by reports of former CIA agents in Ecuador that Roldós Aguilera was assassinated for threatening the interests of the US hydrocarbon industry, this affair remains unsolved – just like most details about the involvement of the Ecuadorean armed forces in the Paquisha War.⁴

Peruvian Lessons

Taken by surprise by the infiltration of Ecuadorean forces on their soil, seriously concerned that General Artieda Levoyer was actually planning to launch an all-out invasion of northern Peru, and hampered by the local terrain and huge distances, the Peruvian armed forces took time to scramble and deploy in response. The FAP’s participation in the Paquisha War was brief, but significant, as reflected by the number of flight hours logged by various of its air groups, listed in Table 18. Indeed, after the experience of the Paquisha War the Peruvians went to great lengths to make sure that no similar Ecuadorean incursions could happen again. Correspondingly, they heavily militarised the zone along the border by constructing extensive fortifications and planting minefields. The sole exception to this rule was the Condor mountain range. Moreover, the FAP quickly adapted its operational doctrine to take account of the combat experience. This became most obvious in its decision to acquire an advanced interceptor equipped with radar, and medium-range air-to-air missiles, and also a helicopter gunship. Correspondingly – backing its decision in the necessity to replace obsolete F-86Fs and Hunters – the National Defence Council authorised the creation of an acquisition committee, tasked with evaluating types like the Dassault Mirage 2000 in France, General Dynamics F-16 Fighting Falcon in the USA, IAI Kfir C.7 in Israel,



Shortly after the sale of ten Mirage M5P3 aircraft to Argentina, a modernization program for the remaining M5P3 from EA 611 was launched in the early 1980s in an effort to improve the type's operational and combat capabilities. This upgrade included the integration of a laser rangefinder, a Thomson-CSF VE 110 CME Heads-Up Display, HOTAS and an in-flight refuelling system. The new sub type had the denomination M5P4 and 15 units were upgraded to this standard with three additional newly built machines, two M5P4 and a single M5DP4, purchased from the factory. (Author's collection)

and the Soviet-made Mikoyan Gurevich MiG-23 (ASCC/NATO-codename 'Flogger'). Following several months of related studies, on 11 October 1982 the Peruvian government and a consortium of French companies including Dassault, Thomson-CSF and SNECMA, signed a contract for Projects Jupiter I and Jupiter II, stipulating the delivery of 22 single and four two-seat Mirage 2000s. The first four of these arrived in Peru on 20 November 1986 (aboard the French merchant



The lessons acquired during the conflict reinforced the FAP decision to acquire heavily armed close support helicopters to provide fire support in rugged terrain and led to the purchase of 16 Mil Mi-25 "Hind D" assault helicopters from the Soviet Union in 1983. (IEHAP)

ship *Francois Billon*), enabling the establishment of Escuadrón Aéreo 412 Halcones, which was declared fully operational in 1988.

Meanwhile, the FAP also sought a suitable attack helicopter. After evaluating the Bell AH-1G Cobra of the US Army, it eventually picked the Soviet-made Mi-25 (ASCC/NATO-codename 'Hind D') and placed an order for 16 of these in 1983. Their deliveries, which began a year later, enabled the establishment of Escuadrón Aéreo 211, based at Mayor Guillermo Protzel del Castillo AB, outside Vitor, in the Arequipa province.

A new conflict was essentially pre-determined – and that almost as soon as the last one was over.



The Ecuadorean gun emplacement at PV-22, with the Peruvian national flag hoisted above it. Fourteen years later, the same area was to become the scene of some of the fiercest fighting between Ecuador and Peru ever. (Photo by Mario Muñoz)

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Notes

Foreword

- 1 Quechua is a family of languages originating in the central Andes that now lie within Peru: it is also spoken through the western part of South America, within seven modern-day countries.
- 2 Dr. Brian T. Brady, a theoretical physicist with the U.S. Bureau of Mines who specializes in rock mechanics, applied his deterministic model for predicting rock bursts in silver mines to the prediction of earthquakes. According to Dr. Brady, this model could be used to predict the location of an earthquake, its magnitude and period of occurrence. The Brady model provoked considerable consternation and controversy among the scientific community. Dr. Brady applied his earthquake prediction model to Peru. He predicted that during mid-1981, a series of earthquakes of unprecedented magnitude – an event with a recurrence level interval of about 800,000 years – would occur off the Peruvian coast near Lima.
- 3 The Aguaruna or Awajún are indigenous people originally from the Peruvian part of the Amazon jungle, related to the Shuar people. There are more than 50,000 members of this tribe who live mainly in the Peruvian departments of Amazonas, Cajamarca, Loreto and San Martín.

Chapter 1

- 1 For details, see Bibliography.
- 2 The Cordillera del Cóndor is a mountain range which serves as a natural barrier between the two countries. Its heights, on the Peruvian side, give birth to several rivers whose streams eventually become tributaries to the Amazon River.
- 3 The Ecuadorians argued that due to the 'discovery' of the Cénepa River, there was not a *divortium aquarum* (watershed) between the Zamora River and the Santiago River, as stated in the Protocol of Rio de Janeiro. Indeed, the Brazilian referee Braz Dias de Aguiar only mentions the rivers Zamora and Santiago as necessary for demarcation purposes and, according to the Ecuadorian point of view, this issue, added to other 'inconsistencies' of the protocol text, led to the decision to unilaterally suspend the demarcation process.
- 4 Suarez, Mariano. <http://Repositorio.uasb.edu.ecf>
- 5 The Governments of Argentina, Brazil, Chile and the United States, who first backed the peace process between the governments of Ecuador and Peru, joined them to sign the agreement and guarantee its execution. The terms of the Rio Protocol included a continuous supervision role for the four guarantors, until the complete demarcation of the Ecuador-Peru border.
- 6 Molina, Cesar. 1994. DISUASION ESTRATEGICA DEL ECUADOR PARA EVITAR UN POSIBLE CONFLICTO CON EL PAIS DEL SUR, Quito, Ecuador: INSTITUTO DE ALTOS ESTUDIOS NACIONALES.
- 7 NOVAK, F. (1995) 'La cuestión limítrofe entre Perú y Ecuador', retrieved from: *Agenda Internacional Vol.2 Num.4* (<http://revistas.pucp.edu.pe/index.php/agendainternacional/article/viewFile/7150/7350>)

Chapter 2

- 1 The SEV-DS-2s were formerly NR1291 (MSN 42) and NR70Y (MSN 43); the AP-7 was the former NX1384 (MSN 145); and the EP-1-68 was the former NX2587 (MSN 147).
- 2 The first P-47 (42-23390) was delivered on 30 September 1947. The second (42-92909) followed on 20 October 1947.
- 3 Guevara, p. 134. Although originally built as FR.Mk 8s, the Meteors in question all had their reconnaissance equipment removed, and served as interceptors and fighter-bombers only. All were operated by the 13th Fighter Squadron, originally based at Salinas, but later at Taura. The last Meteors were withdrawn from service in 1972, by when they were operated by the 2111th Squadron (officially established in 1966).
- 4 Green, p. 88; Guevara, p. 133 & Jones, pp. 125-126.
- 5 Guevara, p. 136. Ecuadorean F-80s and T-33As were initially operated by Tactical Squadron 14 (Escuadrón Táctico 14), from Guayaquil, before moving to Taura. Declared as obsolete, six F-80Cs were returned to the USA in July 1965 and replaced by nine AT-33As (the latter had underwing hardpoints for rocket pods and bombs). By this time, all the remaining F-80s, T-33s and AT-33s were operated by the newly established 2112th Fighter Squadron: together with the 2111th Fighter Squadron, this unit was subordinated to the 21st Fighter Wing.
- 6 Ibid, p. 133.
- 7 Guevara, pp. 138-139. Ultimately, Ecuador acquired four batches of Strikemasters: the first of eight in 1972; the second including eight Mk.89As in 1974; the third of six Mk.90s in 1987, and the fourth (including two aircraft originally built for Kuwait) from Botswana, in 2007.
- 8 Guevara, p. 133.
- 9 Guevara, p. 141. Notably, the Adour Mk.804s provided 8,000lbs thrust with afterburner and 5,370lbs 'dry', thus offering 27% more power than the Adour engines on Jaguars operated by the RAF's GR.Mk.1s.
- 10 The aircraft originally sported the unusual registration G-27-266 and was followed by the first two-seater made for Ecuador, marked as G-27-267.
- 11 Guevara, pp. 141-142. Notably, Ecuador later acquired three ex-RAF Jaguars as sources of spares and, after the 1981 War with Peru, upgraded its surviving fighter-bombers through an avionics upgrade, and the addition of SPS-20 radar-warning receivers (RWRs) and chaff and flare dispensers.
- 12 All of the T-34s in question had their noses, wing tips and tail sections repainted from red to blue, in order to avoid confusion with Peruvian Naval Aviation aircraft, which sported similar identification markings.

Chapter 3

- 1 Name given to former Fábrica Nacional de Aviones Caproni after it was nationalized and later placed under US administration.
- 2 BT-13A Prototype identified with construction number 141 and US civil registry NX-21754.

- 3 Twelve Vultee Model 74 intermediate trainers were purchased by the Peruvian Government directly from Vultee Aircraft Inc. in October 1941 and were delivered on December of that year. These aircraft were identified with factory numbers: 1995, 2005, 2015, 2025, 2035, 2045, 2055, 2065, 2075, 2085, and 2095 and 2105 and had nothing to do with the additional BT-13Bs later arriving via the Lend-Lease program. D. Hagedorn, (personal communication 16/10/2011) FAP Aircraft Acquisitions.
- 4 Purchased through Munitions Assignment Board Case No.1419 and delivered between January and March 1942. D. Hagedorn, (personal communication 16/10/2011) FAP Aircraft Acquisitions.
- 5 The class that graduated on 12 August became known as 'Promoción 31 de Julio'. The class that graduated on 29 December 1942 became known as the 'Capitán José Abelardo Quiñones Gonzales'.
- 6 Construction numbers 41-17054 to 41-17062.
- 7 By contract Project PU-475, Air Force Special Project 109 code-name 'Potomac AB-14D', US Congress authorized the sale of ten brand new AT-6Bs to the Peruvian Government at a unit price of \$29,700.30. D. Hagedorn, (personal communication 16/10/2011) FAP Aircraft Acquisitions.
- 8 As a result of the shutdown of FNA Caproni Peruana operations, Fábrica Nacional de Aviones Caproni Peruana.
- 9 The sale was authorized via Project PU-53 529-A1 which included 30 P-36G (28 delivered, plus four engines, ten propellers and two damaged fuselages to serve as spare parts) for a total of US\$2,060,945.20. D. Hagedorn, (personal communication 16/10/2011) FAP Aircraft Acquisitions.
- 10 Originally flown by the Norwegian Air Force (in exile) in Ontario, Canada, before being returned to the US Government, and then assigned to the USAAC which gave them the P-36G designation, employing them in the advanced training role.
- 11 By Resolución Suprema No.126, March 10, 1942. This former forward airfield received the air base category with the activation of the Escuadrón de Caza 11, in March 1942. Nominally, the EC.11 had a strength of 13 aircraft, plus one reserve. Eventually, it took delivery of 'only' 13 aircraft, without any spare. They received the following serials:

Command aircraft:	11
1st Escadrille:	11-1-1 to 11-1-4;
2nd Escadrille:	11-2-1 to 11-2-4;
3rd Escadrille:	11-3-1 to 11-3-4.
- 12 Former US Civil registry NX 21754, c/n 141, the BT-13 prototype received the CAP serial I-4-10.
- 13 Curtiss H75A-8 Construction Numbers 42-108996 to 42-109005. Douglas 8A-5 Construction numbers 42-109007 to 42-109019.
- 14 These aircraft were initially identified by their provisional serials 10-19.
- 15 Delivered by late October 1942.
- 16 Acquired through the Reimbursable Aid Program (RAP) provisions of MDAP (Case No. OMAP/Peru-46, Project 4T-213). D. Hagedorn, (personal communication 12/07/2012) Shooting Stars in Southern Skies.
- 17 Jones, pp. 137-138. The ex-RAF FMk 4s delivered to the FAP were WT717, WT734, WT756, WT758, WT759, WT765, WT766, WT768, WT773, WT774, WT776, WT779, WT796, WT800, WT803 and WT662. In FAP service, they received serials in the range from 630 to 645. The sole T.Mk 62 came into being through the conversion of the ex-RAF FMk 4 WT706. In the mid-1960s the Peruvians did open negotiations for a possible acquisition of additional Hunters, or an upgrade of surviving FMk 52s to the FGA.Mk 9-like standard, but these fell through when Chile placed its order for Hunter FMk 71s in 1966.
- 18 The pilots in question were Commander (Colonel) FAP José Guerra Lorenzetti (Commanding Officer, CO); Major Augusto Romero Ferrecio; Captains Gonzalo Luza, Arnaldo Velarde Ramírez, Juan Burga Bartra and Cesar Faura, and Lieutenant Hernan Lopez.
- 19 During negotiations with the Greene Mission, Velasco repeatedly denied that his government would be making any kind of compensation to the USA. Eventually, he agreed to pay, but on condition of that part of agreement remaining secret. However, Washington ignored this request and – as soon as the agreement was signed – published details of Peruvian payments to 12 US companies.
- 20 The A-37Bs were acquired through MAP's Foreign Military Sales program, and financed through fiscal years 1974, 1975, and 1976 with US\$2.6 million, US\$13.6 million and US\$1.7 million, respectively.
- 21 For details, see Volume 1.
- 22 Factory designation was S-32M2K, while the Soviet military designation was Su-17M2K, with K standing for 'kommericalny', or export model.
- 23 Cruz, Cesar (2003). Peruvian Fitters Unveiled, *Air Forces Monthly*, August 2003. Ironically, regardless of De la Puente's explanations, Peru actually paid more for its Sukhoi – between US\$250 and US\$325 million – than Brazil paid for its 38 F-5Es. Peru might have paid even less, if it wasn't that the US officials were

convinced that the government in Lima was 'bluffing' about it's, 'sudden lack of interest in the Tiger II'.

- 24 Cesar Gonzalo, interview, 18 April 2019.
- 25 Department of State, CERP 0002: Peru's Relations with Communist Countries, 23 December 1977 (via *Wikileaks.org*).
- 26 Gonzalo, interview, 1999.
- 27 The KKR-1T included one A-39 camera, one PA-1 panoramic camera, and one UA-47 camera for night photography in the front; an ejector for illumination flares in its centre section, and the SRS-9 Virazh ELINT system in the rear. The later was capable of detecting and tracking activity of enemy early warning and fire-control radars. While certainly one of the most sophisticated electronic intelligence-gathering (ELINT) systems in Latin America, it was still an analogue system that lacked operational flexibility. While capable of detecting radars emitting at frequencies from 0.2 to 0.8, or 0.8 to 10.7GHz, it had to be pre-programmed before flight, and lacked the capability to simultaneously track the work of radars emitting in different bands of frequencies.
- 28 Gonzalo, interview, 18 April 2019. Notably, all three facilities are within 4,000 metres of each other.
- 29 In the hierarchy of the FAP, the High Command – presided by the Chief-of-Staff – is the top authority, and the one issuing general orders. The COMOP is the Operations Command of the force, responsible for detailed planning and execution of the High Command's orders.

Chapter 4

- 1 As mentioned earlier, Seymour AB was activated in May 1942 following a mutual defence agreement between Ecuador and the USA – under the same scheme used for El Pato Air Base (known as 'Pecan' in the USA) in Peru.
- 2 It has to be noted that Paquisha, Machinaza and Mayaicu are real populations which are located inside Ecuadorian territory. However, when the Peruvian authorities accused Ecuadorian forces of attacking Peruvian helicopters, the latter argued that the aircraft had been overflying this population when they were attacked. When president Belaunde was presented with the proof of the Ecuadorian infiltration, he called PV-22 'Falso (fake) Paquisha'.
- 3 Berrocal, otros (2010). *Historias Aeronáuticas*, vol. 1. IEHAP, Lima. pp.14-25.
- 4 BAE stands for Buque Armada Ecuatoriana (Ecuadorian Navy Ship) and is thus equivalent to HMS (Her Majesty's Ship) in the Royal Navy or USS (United States Ship) in the US Navy.

Chapter 5

- 1 Muñiz, pp. 75-77.
- 2 Muñiz, pp. 78-79.
- 3 Comisión Permanente de Historia del Ejército del Perú (2006). *XXV Aniversario de las Operaciones Militares en la Cordillera del Condor, Primera operación helitransportada*. Lima, p. 41.
- 4 Calle, interview, 2 September 2016.
- 5 *Historia Ilustrada de la FAE*, p. 118.
- 6 Muñiz, pp. 81-82.
- 7 Ruiz, interview, 20 April 2019.
- 8 Peruvian Air Force, (1981). *Legajo de Operaciones Grupo Aéreo N°7* (pp.175-177) Piura, Perú.
- 9 According to Ecuadorean sources consulted in the course of research for this project (all interviewed on condition of anonymity), all the 'aircraft' photographed by the Su-22 at Taura AB were decoys.
- 10 Muñiz, M, Zlatar, J. *Homenaje a la Fuerza Aérea del Perú*, (Lima, IEHAP: 2013). pp.186-187.

Chapter 6

- 1 From intercepted Ecuadorean radio communications, the Peruvians knew their enemy called it Machinaza (apparently in reference to the actual Ecuadorean border post with this name, on the other side of the Condor mountain range).

Chapter 7

- 1 Mena, Claudio. *Paquisha, The Whole Truth*, (Quito, Letra Nueva: 1981) Pp.89-90
- 2 Ibid.
- 3 Ecuadorian general sources of reference – foremost articles like 'Paquisha: 35 Years of this important Name in the History of Ecuador' (in Spanish), *El Universo*, 22 January 2016.
- 4 'Ecuadorean Leader Dies in Plane Crash', *Associated Press*, 25 May 1981; 'Attorney General announces that Ecuador was part of the "Plan Condor"' (in Spanish), *ElCiudadano.gob.ec*, 14 April 2015; 'Ecuador Marks 35 Years of President Jaime Roldós Aguilera's Death', *Andes*, 24 May 2016.

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Born in Lima, Peru, in 1977, Amaru Tincopa Gallegos is a graduate in law. He developed a strong interest in history at a very young age, and began researching and publishing about Peruvian and Latin American military aviation history.

His first book, covering the deployment history of the *Aeroplani Caproni* and that Italian company's endeavours in Peru for an Italian publisher, was released in 2003. Since then he has published a dozen additional titles in Argentina, France, and the United Kingdom, while three others are in preparation. Amaru Tincopa Gallegos is currently cooperating with numerous renowned military aviation history magazines around the world. This is his second instalment for Helion.